

Tradition and the Federation*

By Ivan L. Bennett, Jr.

AMONG THE RELATIVELY FEW TRADITIONS that have arisen in this relatively young organization, the American Federation for Clinical Research, is that of the presidential address. Most of you have heard past presidents of this or one of the so-called senior societies that meet here during the next few days deliver themselves of the orations expected of them.

Almost as traditional as the presidential address itself has come to be the subject-matter of these dissertations: the financing of research or of medical education; the goods and/or evils of team research; how to write, to read, to deliver, or to listen to a scientific paper; an allegorical representation of clinical research as the ocean tides, the bone marrow, the Krebs cycle, the pituitary-adrenal axis, a culture of bacteria, the clotting mechanism, etc.; why these meetings should or should not be held in Atlantic City every year; the pros and cons of specialty boards; government control of research and researchers; the hard lot of a departmental chairman; a comparison of the first scientific program of the society with today's program, with remarks on the rise of science in medicine; and, of course, periodic reviews of past presidential addresses.

The general meeting of the Federation today has been abbreviated to a single morning session to make way for a series of smaller meetings during the afternoon. I would prefer, therefore, not to take time for the delivery of a presidential address and to go on to the scientific program. However, to fulfill tradition and to satisfy those among you who might feel that you had been deprived of something that is your due, I propose to say a few words about tradition and the American Federation for Clinical Research.

The truth of the truism that there has been a great increase in clinical research in recent

years is perhaps nowhere more evident than in the continuing hypertrophy of attendance and hyperplasia of abstracts submitted at these annual meetings in Atlantic City. Not all of these abstracts are necessarily *good*, but few are really *poor* and many are *excellent*. The traditional form of the meetings here, which the Federation has adopted from its older brothers, calls for the president of each society to choose a few papers for presentation as presumably the "best."

As quantity and quality of papers have increased, this has become an anachronistic, impossible task. The almost traditional practice of the president's enlisting the advice of a committee of anonymous specialists to share credit or blame for the program does not meet the basic problem. Indeed, it has come to be traditional for each president to absolve his committee of all blame by announcing manfully that his and his alone is the full responsibility for the final selections; and it is doubtful that the nameless advisors serve any purpose at all save that of fulfilling tradition.

I do not intend to deny the right of our "senior" societies to select their programs and to conduct their meetings in any way that they wish. It is important, however, to point out that to cling to a system that results each year in a greater disparity between papers submitted and papers presented works to the detriment of the Federation and its purposes. The purpose of our society is somewhat different from that of the American Society for Clinical Investigation and the Association of American Physicians. This organization is intended to help young investigators by furnishing a forum where they can present their work and discuss it with their peers. We are not an exclusive group, there is no numerical limit upon our size, and membership is not intended as an honor or recognition of past accomplishment. The presentation of a paper before the Federation should benefit not only the listener but also the essayist.

*Presidential address, read in part before the National Meeting of the American Federation for Clinical Research, Atlantic City, New Jersey, May 4, 1958.

When the very purpose for which the Federation exists is threatened by a tradition that was taken over or handed down from other societies with differing aims, it behooves us to contemplate the possibility of a change or, if you prefer, to think about establishing a *new* tradition. A beginning step in this direction was the institution three years ago of informal, evening sessions at this annual meeting to enable what might best be termed "special interest groups" to meet under the aegis of the Federation.

Along with the *increase* in attendance and the *increase* in papers submitted for these programs, there have been certain *decreases*. I will mention two of these which are, perhaps, related.

First is the decrease in the percentage of the audience at any given session of any given society who thoroughly understand any given paper. Indeed, many of us, if we would admit it, are coming to judge papers here more by the excellence of the presentation and illustrations than by content. It matters less and less *what* a man says and more and more *how* he says it. This mildly exaggerated characterization is in no way intended to belittle the importance of the principles of good public speaking and the artistic construction of lantern slides.

This first *decrease* is one of the reasons that the Society for Clinical Investigation and the Federation for Clinical Research have this year joined forces in an effort to modify the structure of these meetings — to bend tradition without breaking it. The sectional meetings to be held this afternoon and evening are intended to allow *more* investigators to present their work to *fewer* people, but a *more* interested audience.

The second *decrease* evident at these meetings is a more important one. I refer now to the fact that discussion of papers from the floor, comments, questions, and critical exchange seem well on their way to extinction. This has been generally attributed to the simple *law of mass inaction*. The average person, it is said, is reluctant to delay a large meeting with his comments, is shy about expressing his opinion before the multitude. It is this fear of the whispered comment, "Who the hell does he think *he* is?" or "What's he tryin' to do, give another paper?" that inhibits many who, before a smaller audience of individuals known to have some direct in-

terest in the subject at hand, might unhesitatingly rise to offer comments and additional information.

It is in the unproved hope that the atrophy of discussion at these meetings during the past few years is attributable in the main to the shyness of our members in the presence of a crowd that the joint sessions of this afternoon were planned.

I would conclude these remarks by pointing out that the apparent correlation between *increasing* attendance and *decreasing* discussion during the past few years may not signify a causal relationship. The point that I wish to make is so well expressed in a recent discussion of the general subject of criticism in medicine and the biological sciences by William Bennett Bean¹ that I can do no better than to quote his words, slightly rearranged and wholly out of context:

Why has criticism so languished in science and in medicine? In this country, reticence may stem from the vague but potent belief that criticism is not sporting, that it smacks of the extravagant capers of "oneupsmanship." There is a feeling that we attack a person if we criticize his error... criticism may be delivered in an effective way which cuts with small pain. It can have a result which is constructive if it leads to the correction of error, the improvement of technique, and the debridement of those necrotic evils of obscure style, sterile speculation, and discord between evidence and conclusion which so beset us... The recipient of criticism does not have to believe that we think him a fool or villain because we disagree with what he has said or have detected errors in his work. In a free exchange not embittered by personality clashes, it may be that the critic himself is wrong. This should deepen his learning and his humility, but must not silence him.

It may then require more than a rearrangement of the form of these meetings to renew the worthwhile tradition of critical comment and profitable exchange that was formerly the hallmark, indeed, the *main purpose* of these spring gatherings by the sea.

REFERENCES

1. Bean, William B.: A critique of criticism in medicine and the biological sciences in 1958. *Perspectives in Biology and Medicine*. The University of Chicago Press, vol. 1, no. 2, pp. 224-232 (Winter), 1958.

Cancer Research: a Critique and Some Suggestions

By Solomon Garb*

ALTHOUGH there are many aspects of cancer research, it appears from the published reports that a large proportion of the total effort is devoted to various screening procedures. It may now be time to examine critically the philosophy and practice of some of these procedures.

In many, if not most, screening tests, the mesh is arranged to hold those compounds which inhibit the growth of (or in some way damage) young, rapidly multiplying cells, while allowing to pass through into the discard those compounds which have no selectivity for the rapid multiplier. This approach is based on the widely held belief that cancer cells multiply wildly and at rates which substantially exceed those found in normal cells. Upon reflection, however, it should be clear that cancer cells do not multiply at unusually rapid rates in comparison with other cells. Several examples present themselves and others can probably be added.

The bone marrow cells' rate of multiplication can be calculated on the basis of the rate of replacement of red blood cells. Since there are normally 5,000,000 cells per cubic millimeter of blood and 5 liters of blood in the body, there are about 25,000,000,000 red blood cells, with a life span of about 120 days each. Since the rate of formation ordinarily equals the rate of destruction, it can be calculated that the bone marrow cells usually produce 2,500,000 red blood cells *per second*. After hemorrhage, the rate rises several-fold. Looked at another way, we find that in one year the bone marrow cells normally produce almost 20 pounds of red cells. Surely, there are very few, if any, cancers which at the end of a year weigh anything like 20 pounds.

The epithelial cells lining the gut multiply at rates equivalent to or greater than that of the bone marrow, and it is a matter of common experience that the epithelial cells of the buccal mucosa multiply rapidly enough to heal a minor abrasion or denudation in a few hours.

It may be argued that it is unfair to compare the multiplication rate of one kind of normal tissue with the multiplication rate of cancer cells derived from another type of tissue. However, such a comparison is quite valid in relation to a discussion of screening procedures. If the screening is designed to pick up substances which will affect rapidly multiplying cells, it will choose materials which affect the bone marrow and cells lining the gut. Indeed, all of the substances picked up by such screening procedures thus far have been of little or no value mainly because in adequate dosage they are more toxic to the bone marrow and/or the epithelial lining of the gut than they are to the cancer.

From these considerations, it appears that the approach to cancer chemotherapy is not likely to be fruitful if based on a misconception about the nature of cancer. It may not be possible at this time to define the nature of cancer with enough accuracy to permit the application of a successful, specific screening technic. However, the cancer cell can be considered simply as a "different" cell without much chance of our being wrong. On the basis of this concept, it may prove fruitful to examine differential growth inhibitors — materials which inhibit one type of cell in nontoxic concentrations without affecting other cells. There is a good chance that one or more of such differential growth inhibitors will include in its spectrum of activity some types of cancer, while excluding the cells essential to life.

Growth inhibitors with marked differential potency for various types of cells are found in many species of plants. Described by De Candolle in 1832,¹ they received little attention for almost a century, but interest in them has revived in recent years.

These growth inhibitors are the equivalent of antibiotics. Penicillin, for example, is essentially a differential growth inhibitor released by one species of plant to prevent the growth of other species of plants (certain bacteria). The higher plants did not discard the advantages of chemical warfare enjoyed by their one-celled ancestors, but in many cases they changed the chemical agent to correspond to a change in the

*Senior Research Fellow, United States Public Health Service.

From the Department of Pharmacology, Albany Medical College, Albany, New York.

nature of potential competitors. A familiar example is the black walnut tree. Other plants cannot grow near it, presumably because of the juglone secreted by its roots.

The plant growth inhibitors thus far described by botanists show considerable differences in their spectra of activity. Some inhibit tomato and corn but not barley or oats²; another inhibits beans but not corn. Some inhibit the growth of roots³; others, stems or leaves.⁴ In most cases there is a wide margin between the growth-inhibiting concentration and the toxic concentration, suggesting a true specificity of action.⁴ In many cases, the inhibiting concentration is less than 1 per cent of the toxic concentration.⁴

At this juncture, the question arises as to why anyone should assume that a plant growth inhibitor will inhibit animal cell growth. Although an assumption of this sort may not seem justified at first, a search of the literature discloses that there is actual evidence that plant growth inhibitors do inhibit mammalian cell growth and that they may exhibit a considerable degree of specificity in terms of the type of tissue affected. To be sure, this evidence is fragmentary, but it is enough to suggest strongly that plant growth inhibitors have differential actions on animal cells. In some cases, the investigators were aware of the nature of the material under study but did not extend their studies to a variety of cancers. In other cases, the material had been isolated from plants, purified, analyzed and assigned a chemical name before it was discovered that its botanical function was growth inhibition. During the interval, other investigators had described differential growth inhibition in mammalian cells but did not report further studies. The botanists and zoologists were apparently unaware of each other's work.

Some examples of inhibition of mammalian cell growth by plant growth inhibitors may be of interest. Parasorbic acid (δ - $\Delta\alpha\beta$ -hexenolactone), found in the mountain ash and other plants, was reported by Cormann⁵ to inhibit fibroblasts but not epithelial cells in tissue culture and to inhibit the growth of the Jensen rat sarcoma. Heaton⁶ in 1929 had reported similar findings with an extract whose exact nature was apparently unknown at that time.

Holden et al.⁷ reported that protoanemonin, an inhibitor derived from *Anemone pulsatilla* or *Ranunculus*, inhibits the growth of both fowl

fibroblasts and epithelial cells in tissue culture.

Lustig and Wachtel⁸ reported on the type of chemical that was able selectively to dissolve cancer cells under certain laboratory conditions. Years later, Bonner,⁹ presumably unaware of their work, found the same substance to be the principal growth inhibitor secreted by the roots of the Guayule plant.

Gley et al.¹⁰ reported that certain coumarin derivatives caused atrophy of rat testicles but not seminal vesicles, while other derivatives had a reverse effect. Similar coumarin derivatives were shown by botanists to be the inhibitors secreted by a variety of plants.

More recently, Kraul and Schmidt¹¹ reported that an extract of Camomile retarded the growth of experimental tumors in mice. They were apparently unaware that Newald¹² had shown that a major part of the Camomile extract was a mixture of 7-methoxycoumarin and 7-hydroxycoumarin. Another name for 7-hydroxycoumarin is umbelliferone, and Hamner et al.³ have reported that umbelliferone and its related compound B-methyl umbelliferone are selective plant growth inhibitors.

It must be emphasized that the plant growth inhibitors are concrete chemical entities. Of the 40 or so mentioned in the botanical literature, the structural formulae of about half have been elucidated and the material purified or synthesized. Indeed, we have been able to procure 16 of these materials in generous quantities and are initiating studies with them. Only one had been reported as having been tested in experimental cancer chemotherapy studies.^{13,14}

There is little chance that any material will prove effective in all types of cancer. There is already convincing evidence that many cancers differ in their metabolism from other cancers; for example, prostate carcinoma secretes acid phosphatase, while malignant melanoma secretes melanin or melanogen. It thus seems likely that a substance affecting one type of cancer would be ineffective with other types. Indeed, there is a good parallel with the antibiotics. Penicillin would never have been discovered if the original studies with it had employed *E. coli* as the test organism. For these reasons, it appears worthwhile to test potential anti-cancer materials on the widest possible spectrum of cancers.

On the basis of all the foregoing considerations, it appears that a study of the effects of plant growth inhibitors on the widest possible

variety of normal and malignant cells may be a fruitful approach to the problem of cancer.

REFERENCES

1. DeCandolle, A. P.: *Physiol. Vegetal* 3:1474, 1832.
2. Gray, R. and Bonner, J.: Structure determination and synthesis of a plant growth inhibitor, 3-acetyl-6-methoxybenzaldehyde, found in leaves of *Encelia farinosa*. *J. Am. Chem. Soc.* 70:1249, 1948.
3. Hamner, C. L., Sell, H. M., Klomparens, W., and Vaughn, J. R.: Selective inhibition of the growth of green plants and fungi by beta methyl umbelliferone. *Bot. Gaz.* 112:135, 1950.
4. Schreiner, O. and Reed, H. S.: The toxic action of certain organic plant constituents. *Bot. Gaz.* 45:73, 1908.
5. Cornman, I.: The responses of onion and lily mitosis to coumarin and parasorbic acid. *J. Exp. Biol.* 23:292, 1947.
6. Heaton, T. B.: The effect of inhibition of connective tissue growth by means of substances present in tissue abstracts. *J. Path. Bact.* 32: 565, 1929.
7. Holden, M., Seegal, B. C., and Baer, H.: Range of antibiotic activity of protoanemonin. *Proc. Soc. Exper. Biol. & Med.* 66:54, 1947.
8. Lustig, B. and Wachtel, H.: The relation between the steric grouping of atoms and malignant tumors in the cytolytic reaction of Freund and Kaminer under different conditions. *Ztschr. Krebsforsch.* 43:343, 1936. (Cited in *Chem. Abstracts* 30:6445, 1936.)
9. Bonner, J.: Relation of toxic substances to growth of guayule in soil. *Bot. Gaz.* 107:343, 1946.
10. Gley, P., Mentzer, C., Delor, J., Molho, D., and Millon, J.: Antimasculinizing agents derived from coumarin. *Compt. rend. Soc. de biol.* 140:748, 1946.
11. Kraul, M. A. and Schmidt, F.: On the growth-checking effect of certain extracts of the camomile flower and of a synthetic azulon preparation on experimental tumors in mice. *Arch. d. Pharm.* 290:68, 1957.
12. Newald, F.: The spasmolytic fraction of the camomile blossom. *Ztschr. Naturforsch.* 7b:60, 1952. (Cited in *Chem. Abstracts* 46:10459e, 1952.)
13. Stock, C. C.: Negative data from experimental cancer chemotherapy studies. I. *Cancer Research*, Supplement no. 1, 1953.
14. —: Negative data from experimental cancer chemotherapy studies. II. *Cancer Research*, Supplement no. 2, 1955.

NOTICES

Change in National Office

Every three years the national office of your Federation has undergone a migration which has become increasingly painful in direct proportion to the society's growth. This is occasioned by the election of a new secretary-treasurer and the practice of locating the national office wherever he happens to be.

With the striking growth in Federation membership to almost 3,000, and with the wandering nature of its restless, active souls, one-third of whom change their address each year, the National Council has been aware of the serious administrative problems involved in their periodic dislocation. This concern was underscored with the realization that even your officers are subject to restless ways of academic medicine, and Dr. William Stead, during his recent term of office, migrated to the University of Florida School of Medicine.

The Council has, therefore, wisely explored the possibilities of a potentially permanent administrative relationship, and Dr. Albert Mendeloff, Dr. Stead, and your secretary were appointed a committee to explore the possibility of administrative assistance which might appropriately be obtained at the time of the present change in officers.

After careful investigation of several possibilities, the Federation has engaged the services of Mr. James E. Bryan and Mr. H. Randall Norris as Executive Secretary and Associate Executive Secretary for a trial contract, with the hope that this relationship may progress to a permanent administrative office for the Federation.

Mr. Bryan brings a long experience in medical administration and has served as the director of many health, welfare and civic organizations. He is on the faculty of Columbia University School of Public Health in administrative medicine and serves with such organizations as the World Medical Association and the National Medical Foundation for Eye Care.

Mr. Norris has worked with a number of county and state medical societies and brings a long experience as a consultant in medical public relations and organizational work.

We wish to formally welcome Messrs. Bryan and Norris and hope that their association in Federation work will be a pleasant one.

The physical transition of the national office will take place between July 15 and August 1,

and we apologize for any delays that may occur during the moving process. Because of the continuing guidance of Dr. William Stead and the cooperation of Miss Lila Mitchell, our experienced administrative assistant, we have high hopes that the dislocation trauma will be held to a minimum.

Effective July 15, all members are requested to address routine inquiries and communications about membership, financial and administrative matters directly to the National Office, 250 West 57th Street, New York 19, N.Y., and are invited to call directly at COlumbus 5-3778 if they are in the New York vicinity.

Communications about policy and professional matters may be directed, as previously, to the Secretary-Treasurer, The Department of Medicine, Georgetown University Medical Center, Washington 7, D.C., FEDeral 3-2000, Ext. 634.

George E. Schreiner
Secretary-Treasurer

Section Meetings Calls for Abstracts

Midwestern Section: The Annual Meeting will be held on Thursday, October 30, 1958, at 9:00 A.M. in the auditorium of Thorne Hall, Northwestern University Medical Campus, Lake Shore Drive and Superior Street, Chicago, Illinois. Headquarters will be at the Drake Hotel. Abstracts must be postmarked not later than September 4 (Thursday), 1958 and sent to Dr. John F. Mueller, Department of Medicine, Cincinnati General Hospital, Cincinnati 29, Ohio.

(Abstracts may not be withdrawn after September 11.)

Eastern Section: The Annual Meeting will be held on Friday, December 12, and Saturday, December 13, 1958 in the auditorium of the Jimmy Fund Building, 35 Binney Street, Boston, Massachusetts. The meeting on December 12 will be from 9:00 A.M. to 5:00 P.M. and from 8:00 P.M. to 10:00 P.M. The meeting on December 13 will be from 9:00 A.M. to 12:00 Noon. Abstracts must be postmarked not later than October 20 (Monday), 1958 and sent to Dr. William B. Schwartz, New England Center Hospital, 171 Harrison Avenue, Boston 11, Massachusetts.

(Abstracts may not be withdrawn after October 27.)

Southern Section: The Annual Meeting will be held on Thursday, January 22, and Saturday,

January 24, 1959 in the Hotel Jung, New Orleans, Louisiana. The meeting on January 22 will be from 9:00 A.M. to 5:00 P.M. The meeting on January 24 will be from 9:00 A.M. to 12:00 Noon. Abstracts must be postmarked not later than November 3 (Monday), 1958 and sent to Dr. Ellard M. Yow, Baylor University College of Medicine, Texas Medical Center, Houston 25, Texas.

(Abstracts may not be withdrawn after November 10.)

Western Section: The Annual Meeting will be held on Wednesday, January 28, and Thursday, January 29, 1959 in the Golden Bough Theatre, Carmel, California. The meeting on January 28 will be from 1:30 P.M. to 5:30 P.M. The meeting on January 29 will be from 9:00 A.M. to 12:30 P.M. Headquarters will be at the LaPlaya Hotel. Abstracts must be postmarked not later than November 3 (Monday), 1958 and sent to Dr. Richard J. Havel, University of California Medical Center, San Francisco 22, California.

(Abstracts may not be withdrawn after November 10.)

Rules Applying to Abstracts

1. The title should be brief, with capitalization only of initial letters, and no capitals in prepositions, conjunctions, or articles. It should clearly indicate the nature of the investigation. It should be followed by the names and institutional affiliations (if no institution is involved, only the city should be given) of the authors. Authors' names should be underlined. Degrees, titles, institutional appointments, and membership status are omitted. Support of the work by a research grant will not ordinarily be mentioned.

The title and identifying material should be double spaced at the top of the first page of the abstract. A separate title page should not be used.

This model should be exactly followed:

The Effect of Nitrate Ingestion on the Ammonia Content of Hepatic Venous Blood

By John W. Throckmorton and Angus McBeth. Sixth Medical Service, City Hospital, West Pines, Georgia, and Department of Medicine, Busby Medical School.

2. The body of the abstract must not be longer than 300 words, organized in the following manner:

(a) A brief statement of the purpose of the study (preferably one sentence).

(b) A statement of the methods used.

(c) A summary of the results obtained.

(d) A statement of the conclusions reached.

It is not satisfactory to say, "The results will be discussed."

3. The text should be intelligible without reference to tables or graphs, which *cannot be published* in this journal.

4. The use of standard abbreviations (RBC, for example) is desirable. This journal uses Kg., Gm., mg., μ g., cc., L. (for liter), mEq., M. (for meter), and the per cent sign (%). A special or unusual abbreviation should be followed by a parenthetical explanation the first time it is used. Numerals, rather than words, should in general be used to indicate numbers, except in beginning sentences.

5. Each time the proprietary name of a drug is used in title or text, the first letter should be capitalized. Nonproprietary names should be written without capitals.

6. Abstracts, *including titles*, should be double spaced. The original and five copies must be submitted. The original should be on ordinary white bond paper; contrary to previous instructions, the copies should be on thin paper.

7. Each abstract must be accompanied by a covering letter giving the name, address, age and membership status of each of the authors and stating which author will present the paper. No one who has passed his forty-first birthday may present the paper.

8. One of the authors must be a member or the paper must be introduced by a member.

Action of the Council

At the meeting of the Council of the American Federation for Clinical Research held in Atlantic City on May 3, the following actions were taken: (1) The length of the abstracts for the national meeting was reduced from 300 to 250 words. This does not pertain to the section meetings. (2) The call for abstracts for the national meeting shall state that no paper will be accepted for presentation if it has been previously presented at any other national meeting. (3) Because of the increase in the number of abstracts submitted, a member of the Federation may in the future

either introduce or submit only one paper for the national meeting. He may, however, also be a co-author on a paper submitted by another member. (4) A committee was appointed to select a suitable successor for Dr. David T. Graham, the editor of *Clinical Research*, whose term expires May, 1959. (5) The process of approving new membership applications was simplified and the secretary-treasurer was empowered to act on all candidates who clearly meet the requirements. Doubtful applications will continue to be reviewed by five members of the council. (6) A committee was appointed to work with the American Society for Clinical Investigation on the meetings of the two organizations in 1959. (In the negotiations with the committee from the ASCI it was agreed that the 1959 meeting would take the same form as the 1958 meeting.) (7) A committee was appointed to obtain a permanent location for the national office of the Federation. The Federation's operation has become so complex in the past several years that it is impractical to move the office every three years with the election of a new secretary-treasurer. (8) In accordance with the constitution of the Federation the officers of the Federation were elected by the council. These were: Albert I. Mendeloff, president; William W. Stead, vice-president; George E. Schreiner, secretary-treasurer.

William W. Stead
Secretary-Treasurer

National Officers

At the May national meeting, Dr. Albert I. Mendeloff succeeded Dr. Ivan L. Bennett, Jr. as President of the Federation. Dr. William W. Stead became Vice-President and Dr. George Schreiner Secretary-Treasurer. Dr. S. Richardson Hill, Jr. was elected to the National Council.

Editorial Board

Dr. Arnold S. Relman and Dr. David E. Rogers are new members of the editorial board of *Clinical Research*, succeeding Dr. Mendeloff and Dr. John H. Moyer.

National Research Council

The American Federation for Clinical Research was unanimously approved for continued representation for the next three years in the National Research Council at the latter's annual meeting March 30-April 1, 1958. Ours is one of

the youngest societies represented, with membership derived largely from the ranks of developing medical scientists, and this endorsement of the Federation should point up its stature and be a source of pride to each of its members.

William J. Harrington
Representative to the
National Research
Council

Application for Membership

1. Young research workers are encouraged to apply for membership. It is unnecessary to await a member's invitation to join the AMERICAN FEDERATION FOR CLINICAL RESEARCH.

2. There is one requirement for regular membership: publication of a meritorious investigation in clinical medicine or allied sciences. This should not be a case report or an abstract.

3. An applicant must ask a member of the Federation who knows him to sign his application.

4. Interested individuals should write to: American Federation for Clinical Research, 250 West 57th Street, New York 19, N. Y.

New Research Tools

The information reported here is obtained from manufacturers. All notices and inquiries should be addressed to New Research Tools Editor, Samuel N. Turiel & Associates, Inc., 750 N. Michigan Ave., Chicago 11, Ill. Include name(s) of the manufacturer(s).

- Packaged set of radioactivity absorbers, consisting of 24 lead and aluminum discs, used with a detector and a scaler or count-rate meter. Nuclear-Chicago Corp.

- Mevalonic acid tagged with radiocarbon-14. Tracerlab, Inc.

- New detection unit for carbon counter which provides for analysis of a standard 2-inch diameter sample. Tracerlab, Inc.

- New model of instrument for analysis by gas and vapor chromatography, which handles samples of materials "that boil up to 475°C. and higher." Burrell Corp.

- Computing spirometer, which instantaneously computes MBC and TVC values. Colson Corp.

- Digital cardiotachometer, with linear scale pulse rate presentation "over a wide range" in both numerical and proportional form. Colson Corp.

- Dynamic condenser electrometer for measuring soft-beta emitting isotopes. Nuclear-Chicago Corp.

Obituaries

The National Office has been notified of the death of the following members:

Dr. Maurice Bruger, New York, New York
Dr. Robert Francis Dillon, River Forest, Ill.
Dr. Herbert L. Goodman, Detroit, Michigan

Dr. Jack D. Rosenbaum, Boston, Massachusetts.

ERRATUM

The name of the first author of the abstract "Metabolism of Tritiated Thymidine in Man," on p. 267 of the April 1958 issue, should be corrected to Joseph R. Rubini.

CURRENT COMMENT

The chairmen of the general meeting of the Federation, and of the section meetings sponsored jointly by the Federation and the American Society for Clinical Investigation, held in May of this year, were invited to submit comments on any aspects of their meetings which seemed to them worthy of note. We hope that their remarks will interest those readers who attended the meetings as well as those who did not, and that they will help carry out the function of *Clinical Research* as a medium for the expression of opinion.

General Meeting

Thirteen papers were presented before the general meeting of the Federation on the morning of May 4 in Atlantic City. The Steel Pier Theater was crowded throughout the meeting. Despite the large attendance, there was active and extensive discussion of the material presented, many questions were asked, and much additional information concerning each topic was brought up from the floor.

The papers were selected for the program on the basis of probable general interest, and abstracts describing specific and complex investigations of a highly specialized nature were, in large part, turned over to the chairmen of the sectional meetings. The enthusiastic reception of the program at the general session and the amount of discussion in response to the presentations raise considerable doubt about the validity of the argument that large gatherings stifle comments from the floor. It seems more likely that the decline in audience participation in recent years at the national meeting has resulted from the increasing specialization of the subject matter presented.

The sectional meetings during the afternoon and evening were well attended and participation in the discussion was active. It cannot be said that all went smoothly in every meeting, but, in general, the new program form was unusually successful. As more experience is gained with this type of meeting, particularly in the selection of papers appropriate for the general meeting and in the grouping of papers on related subjects in the sectional meetings, it can be expected that its great advantages will be exploited to the fullest extent.

Perhaps the most hopeful sign of all in the new program was the excellent cooperation between the Federation and the Society for Clinical Investigation that made the sectional meetings possible.

Ivan L. Bennett, Jr.
The Johns Hopkins Hospital
Baltimore, Maryland

Section I

Meeting under the joint sponsorship of the American Federation for Clinical Research and the American Society for Clinical Investigation, Section I convened first on Sunday afternoon, May 4, 1958 in the large Steel Pier Theater. Although the attendance was good for a sectional meeting, the size of the theater seemed somewhat overwhelming. It was the opinion of the chairman that it tended to discourage intimate discussion of the interesting papers presented during the afternoon session.

The first five papers of the afternoon dealt with problems of research in the field of respiration. The first two, presented by groups from Detroit and Boston, dealt with the measurement of pulmonary diffusion capacity, a topic cur-

rently of considerable interest in the respiratory field. Additional papers were presented on the free collapse of the human lung, a study of the hypercapnea of emphysema and the effects of rheumatoid spondalitis on respiration.

Following this there were two papers from New Orleans and St. Louis dealing with the basic studies on the use of radioactive rubidium for the estimation of coronary blood flow. Such studies suggest that not only would this be a useful method for measuring coronary blood flow in experimental animals, but perhaps eventually in human subjects as well, without the complication of coronary sinus catheterization. The authors were conservative in their conclusions, and one carried away the feeling that this method was subject to considerable variability which required further study. The direct application to patients appeared to be some distance in the future. The afternoon session was concluded by papers on coronary blood flow in normal men and women and a study of the effect of molar sodium lactate on the cardiotoxic effect of quinidine. The former paper demonstrated a striking difference in coronary hemodynamics between the sexes. There was considerable discussion.

The evening session was held in the Carolina Room of the Chalfonte Hotel. Although there had been some expression of mixed feeling as to the advisability of evening sessions, the attendance was large and enthusiastic, there being few empty chairs at any time. The room seemed more suited to discussion and this certainly proved to be the case. The first paper was presented by Dr. Carleton Chapman on left ventricular function as evaluated by cinefluorographic method. Following this, there were three papers dealing with the use of dye dilution curves in detecting the presence and amount of valvular regurgitation. The first, from London, was concerned primarily about studies on a mechanical model. The second, from Syracuse, dealt with animal experimentation, and the final paper, from Salt Lake City, considered the problems in human subjects. There was extensive discussion which resulted in a small symposium on dye dilution curves. Professor John McMichael of London was present and discussed some of the ideas emanating from his institution. Although our understanding of the nature of these curves is increasing, it appeared to the chairman that we have a much more complicated system than originally supposed and that we are only beginning to ap-

preciate the multitudinous factors that contribute to the contour of the dye injection curve. The meeting was concluded by two papers on the size of ventricular septal defects and the study of vascular hyper-responsiveness in arterial hypertension.

It seemed to the chairman that the sectional type meeting was quite successful. At the evening session particularly, the room, the papers and the personalities reacted in just the right fashion to produce an enthusiastically received meeting.

James V. Warren
Department of Medicine
Duke University
Durham, North Carolina

Section II

The large number of excellent abstracts submitted by members of both societies in the broad field of metabolism and endocrinology made selection of 15 papers a pleasant though difficult task. While merit served as the prime standard, attempt was made to secure diversity of interest and to provide material that would stimulate discussion. Both the afternoon and evening sessions were very well attended, the Viking Room proving too small for the evening meeting, and the audience provided excellent discussion.

The failure of aldosterone to maintain sodium retention was shown by Nelson to involve factors other than tolerance, increase in filtration rate and volume changes. Vigorous discussion of this material brought out the complexity of influences on sodium reabsorption.

Henneman advanced the interesting hypothesis that the presence of a persistently acid urine could be responsible for uric acid stone formation in patients without abnormal concentration of serum or urinary uric acid, and he advanced data to indicate that impairment of tubular ammonia secretion might be the significant metabolic abnormality. Among the several discussants, Sirota made the most searching query concerning the possibility that the impairment of ammonia secretion was due to renal damage.

Mueller presented data on blood and urine citric acid in control subjects and patients with metastatic carcinoma before and after the administration of corticoid therapy. The elevated levels in metastatic cancer could be attributed to neither delay in removal nor increased production by the tumor, but might be the result of

bone or hepatic involvement. Dorothy Henneman commented on her studies which indicated that the decreased blood and urine citric acid levels following cortisone therapy were due to decreased production of citric acid.

Eisenberg and his associates presented extremely interesting data on the use of nonradioactive strontium as a measure of rates of osteogenesis and made the interesting observation that the seemingly beneficial effects of androgen and estrogen in senile osteoporosis were related to changes in renal excretion of lime salts rather than movement of calcium and phosphorus into bone.

Furman presented data on the effects of diet and androgen administration on blood lipid levels, demonstrating the most marked cholesterol depression on a protein-free diet, and noted that in the absence of dietary protein, methyl testosterone led to even further reduction in serum lipids without any fall in alpha/beta lipoprotein ratio. It was also noteworthy that no creatinuria occurred in patients given methyl testosterone while on a low protein diet. The discussion following this paper brought out many points, one of the more important being the possibility that deficiency of essential amino acids might be responsible for these changes.

Two excellent papers involved hypothalamic control of thyroid function. Blanquet showed that destruction of the median eminence by a focused beam of high energy particles dissociated thyroid function in the sense that radioiodine uptake was not decreased, whereas thyroxine content of the thyroid gland dropped to very low levels. Bakke studied thyrotropin concentration and content in the rat pituitary under conditions designed to increase TSH activity. Initially, there was a drop in TSH concentration, apparently the result of rapid release, but then TSH concentration progressively increased. It was also of interest that the test animal developed progressive exophthalmos in the long-term study.

Carr presented data which clarify the perplexing problem of crossover of the placental barrier by thyroid hormone. From his studies it seems apparent that there is some transfer of thyroxine across the placenta, but that adequate transfer requires high levels of maternal hormone. This paper, and the discussion which followed, offered further evidence that the great majority of cretins undoubtedly develop the disease *in utero* and that treatment after birth rarely results

in restoration of normalcy. Data were presented to suggest that high dosage of thyroid during pregnancy could prevent the development of cretinism.

The final paper on the afternoon program by Waldmann summarized studies and data from the literature dealing with the idiopathic hypoalbuminemic syndromes which were divided into the hypercatabolic and anabolic types.

The evening program began with a very interesting paper by Hollander dealing with sensitivity of isocitric dehydrogenase to estradiol in human breast cancer. This technic shows promise as a method for determining by *in vitro* study of malignant tissue the type of hormonal therapy or glandular ablation that seems desirable.

Leach advanced data to suggest that norethandrolone would effect gonadotropin suppression without androgenic or estrogenic activity. This controversial paper led to a very spirited discussion in which the theories of androgenic-anabolic dissociation were attacked and in which the consensus seemed to hold that dose response effects were dominant in gonadotropic suppression.

Freinkel presented data on the metabolism of insulin by human placental tissue which not only offered an extremely interesting methodologic approach but demonstrated that the placenta is still another tissue which may inactivate insulin. The clinical implications of this study are obviously very important.

The paper by Laster suggested another pathway of uric acid metabolism as well as a possible link between therapeutic effectiveness of certain drugs and uric acid riboside phosphorylase inhibition. Discussion, led by Wyngaarden, raised the important points that the doses of colchicine effective in such inhibition were far in excess of those therapeutically effective in gout and that this phosphorylase is not present in human erythrocytes.

The paper of Amatruda dealing with the steroid withdrawal syndrome was of great interest and promoted extremely interesting discussion. From this paper it is apparent that many of the symptoms which follow steroid withdrawal are not secondary to decreased production of adrenal corticoids. It led to a discussion, in which no firm answers could be given, regarding methods of determining which patients should be treated during stress after prolonged corticoid therapy.

The last paper of the evening session involved study of protein anabolism in potassium deficiency. Herndon showed that large amounts of nitrogen could be retained despite potassium depletion.

Although the Chairman has not been entirely sympathetic with the demand for specialized section meetings, the plethora of superb abstracts, the value derived from hearing a number of papers which would not otherwise be on the program and, most particularly, the opportunity to create an environment for adequate give-and-take discussion, has effected his complete conversion regarding the need for, and value of, section meetings of this type.

Laurence H. Kyle
Georgetown University Hospital
Washington, D. C.

Section III

The large number of abstracts submitted to the subsection chairman, and the overflow crowd which filled the Viking Room for most of the afternoon and evening sessions, demonstrated that "kidney and electrolytes" continues to be a field of major interest to clinical investigators.

Currently, one of the most active areas for research is the problem of the mechanism by which the urine becomes concentrated or diluted. Conceptual horizons have been considerably broadened by recent work of several laboratories, most notably that from Berliner and his associates in Bethesda, DelGreco and De Wardener in London, Gottschalk in Chapel Hill and Wirz in Basle. While no definitive conclusions can yet be drawn, it seems clear from these studies that factors other than vasopressin play an important role. These factors include the rate of glomerular filtration, the osmotic load presented to the distal nephron and the integrity of the "sodium pump," which is probably ultimately responsible for the establishment of osmotic gradients. The first three papers of the afternoon session provided interesting information concerning this subject. W. D. Blake of Portland reported that reduction of blood flow (and GFR) to one entire kidney by partial occlusion of the main artery always increased the osmotic pressure of the urine, but complete cessation of flow to a portion of the kidney, induced by clamping a branch of the renal artery, resulted in *reduction* in osmotic pressure of the urine when the control samples

were hypertonic. These observations emphasize that investigators must be cautious in interpreting net reductions in blood flow and filtration rate.

L. G. Raisz, W. Y. W. Au and R. L. Scheer of Syracuse reported that net water reabsorption in dehydrated subjects, infused with vasopressin and osmotic loads of mannitol and urea, tended to increase with increasing osmotic load. With extremely high loads reabsorption of "free" water began to decrease again. These observations underline the importance of osmotic load, even in the presence of steady infusions of vasopressin, in determining the concentrating function of the kidney.

Finally, H. P. Schedl and F. C. Bartter of Bethesda presented a report suggesting that the defect in diluting ability manifested by cirrhotics can be overcome by increasing the osmotic load presented to the kidneys. They postulate that osmotic loading increases the delivery of sodium and water to distal sites in the nephron where "free" water can be generated. Increased proximal reabsorption of glomerular filtrate rather than excessive or persistent vasopressin activity is therefore suggested as the main defect responsible for the disturbance in water excretion in liver disease.

The role of tissue buffers in the adjustments to respiratory acidosis in the rat was pointed out by the two following reports, one from New Haven (H. Levitin, C. R. Jockers and F. H. Epstein), and the other from Dallas (N. W. Carter, D. W. Seldin and H. C. Teng). Both groups found small reductions in muscle potassium and the Dallas workers also noted reduction in muscle sodium. These were interpreted to mean that tissue buffers are capable of buffering carbonic acid as well as stronger acids. The New Haven group found no significant change in bone sodium or potassium. Previous observations by F. H. Epstein and associates on the renal response to respiratory acidosis in the rat were confirmed by the Dallas workers who reported that urine ammonia and chloride excretion were initially increased by the hypercapnea. The reduction in plasma chloride was shown to be due in part to renal excretion. Despite profound acidosis, and despite the changes in ammonia excretion and bicarbonate reabsorption, the Dallas workers found no change in renal glutaminase or carbonic anhydrase activity.

O. Wrong and E. F. Davies of Manchester,

England presented an interesting study of the excretion of acid in renal disease. In confirmation of the work of earlier investigators, it was reported that patients with severe renal disease without evidence of so-called "renal tubular acidosis" could usually excrete an acid urine when stimulated with ammonium chloride, even when they were clinically uremic and acidotic. The rate of ammonium excretion was invariably depressed in severe renal failure and could be correlated with the glomerular filtration rate. In renal tubular acidosis impairment of acidification appears to be the rule, and it could not be stated whether reduction in ammonium excretion is due to failure of acidification, to reduced glomerular filtration or to a specific tubular defect.

E. D. Pellegrino and S. J. Farber of New York reported the results of their extensive study of human bone electrolytes in various disease states. The average values of the major electrolytes of tibial human bone obtained at autopsy were found to be remarkably constant in a wide variety of diseases, even when serum electrolyte values were grossly disturbed. Bone sodium was slightly reduced in severe metabolic acidosis. These are somewhat sobering data which, if confirmed, would require a re-evaluation of commonly held concepts about the physiological "availability" of bone electrolytes in man.

E. E. Muirhead and J. A. Stirman of Dallas presented studies bearing on the mechanism of the anemia associated with renal disease. They demonstrated that in dogs an intracorporeal defect appears to develop rapidly following nephrectomy, leading to accelerated hemolysis. Uremia produced by ureterocaval anastomosis was not associated with this disorder, indicating that some nonexcretory renal function may be necessary for prevention of the development of the cellular defect. Such studies as this are much needed to clarify this complex problem. The answer to the anemia of uremia apparently is not going to be simple, however, and there is now evidence to indicate erythropoietic defects, humoral hemolytic mechanisms, as well as a corporeal defect.

The last paper of the afternoon session was a study by G. W. Welsh and E. A. H. Sims of Burlington, Vermont of the mechanism of glucosuria in pregnancy. These workers showed clearly that renal glucosuria can be due either to an increase in glomerular filtration rate or to a reduction in the tubular capacity for glucose

reabsorption. In many ways these changes resemble those produced by adrenal corticoids.

In the evening session, A. P. Shapiro of Pittsburgh presented some of his further studies on experimental chronic pyelonephritis in rats. He reported that hypertensive vascular disease does not develop in these animals even after one year of continuous infection, and despite progressive renal damage. To explain the clinical coincidence of hypertension in human pyelonephritis, therefore, the author undertook to assess the susceptibility to renal infections of rats made hypertensive with DOCA and salt. Such animals proved to develop renal infection after *E. coli* inoculation significantly more frequently than normotensive controls. The tentative conclusion drawn was that the human correlation between hypertension and pyelonephritis may be a matter of enhanced susceptibility rather than cause and effect.

L. H. Maffly and A. Leaf of Boston presented their data on the osmolality of tissues using a newly developed melting point technic which appears to have many theoretical advantages over previous methods. Their data show clearly that the osmolality "or more correctly, the water activity" within cells is the same as that of extracellular fluid. This well-conceived study would appear to go far towards settling the long-debated question of osmotic gradients across the cell membrane.

E. R. Borun and S. Perry, Los Angeles, presented very interesting data concerning differences in the rate of potassium exchange in erythrocytes of different ages, the older cells apparently equilibrating more rapidly than the younger ones. Equilibration rates per unit cell, however, were similar and the difference is explained by variations in water and potassium content. These data would appear to provide a satisfactory explanation for earlier observations of rapidly and slowly exchanging fractions of red cell potassium.

An elegant study of the electrical potential developed by the large intestine was presented by I. L. Cooperstein and S. K. Brockman from Bethesda. A stable potential of 10 to 40 millivolts (lumen negative) was observed across the dog's bowel. Active transport of sodium from lumen to blood against an electrochemical potential, plus active inward transport of bicarbonate ion, appeared to be the primary sources of this potential difference. Potassium and chloride

movements were along electrochemical potentials. Thus, once again we have evidence of active transport of sodium apparently acting as the key process in a system involving simultaneous movements of many other ions.

The final paper of the evening on the "Effects of Calcium on Urine-Concentrating Ability" was presented by J. Grossman, M. F. Mines, A. G. Goldman and M. Wolfman of New York City. These workers presented evidence, which has been independently corroborated by a number of other laboratories, that administration of calcium has some specific inhibitory effect on renal tubular reabsorption of free water. The polyuria associated with various clinical hypercalcemic states is quite probably related to this phenomenon, but no precise mechanism has yet been elucidated.

After listening to sessions such as these, and after reading the abstracts submitted, it is difficult to obtain any single impression about the direction of current interests in this complex field. One clearly evident trend, however, is the increasing interest in the physical and chemical basis of electrolyte physiology. As in so many other areas of biology, investigators are turning more and more to the molecular phenomena of the cell and the cell membrane to provide explanations of physiologic and clinical events. Similarly, studies in renal physiology seem to be moving in the direction of more and more precise localization of molecular events in particular parts of the nephron. In this connection, renewed interest in micropuncture techniques is now being manifested. One may well expect that significant advances in our knowledge of renal physiology will once again come from further exploitation and refinements of the methods first developed by A. N. Richards and his colleagues.

Arnold S. Relman

Massachusetts Memorial Hospitals
Boston, Massachusetts

Section IV

The meeting of the hematology section was held in the Carolina Room of Hotel Chalfonte from 2:30 to 5:30 P.M., Sunday, May 4, 1958. About 600 to 700 persons attended, and 35 members of the audience participated in lively discussion of the 8 papers presented. One person had been asked in advance to initiate the discussion of each paper, but all discussants were asked to limit their remarks to 3 minutes and to avoid presentation of second papers. Three of the

papers were selected from abstracts submitted to the American Federation for Clinical Research and 5 from abstracts submitted to the American Society for Clinical Investigation.

Gardner, Aas, Cohen and Pringle of Boston reported observations on blood platelets tagged with $Na_2Cr^{51}O_4$ in 51 patients with a variety of hematologic disorders. Body surface-counting over spleen, liver and lungs failed to reveal sites of platelet sequestration in any case. Normal life span of both isologous and autologous-tagged platelets helped to exclude an immune mechanism in several cases of chronic idiopathic thrombocytopenia. Normal survival of tagged platelets in congestive splenomegaly suggested that thrombocytopenia was due to inhibition of platelet production rather than peripheral destruction associated with splenic sequestration. In discussing this paper, Reisner of New York reported general agreement with these results except in the group with congestive splenomegaly.

Athens, Mauer, Ashenbrucker and Cartwright of Salt Lake City presented several possible models for granulocyte kinetics based on studies with DF P³²-labelled leukocytes. There was no evidence of reutilization or elution of the label or of removal from circulation of cells damaged by the label. Craddock of UCLA and Pollycove of Berkeley were in general agreement.

Bloom, Shulman and Witebsky of Buffalo described anticomplementary activity (ACA) of serum as a common finding in multiple myeloma. In one case ACA was detected 17 years before myeloma became apparent. Heating of serum at 55 to 65°C. potentiates ACA. Identification of a protein fraction responsible for ACA in myeloma has not been accomplished.

Linman of Chicago presented data on normal rats given 20 daily injections of batyl alcohol which produced reticulocytosis, erythrocytosis, thrombocytosis and marrow hyperplasia. The newly formed red cells were microcytic and showed increased osmotic fragility. There was no increase in hemoglobin or hematocrit. Batyl alcohol has been isolated from bone marrow and is thought by Linman to be closely related to the thermostable factor present in plasma which is capable of accelerating erythroblastic cellular division. Crosby of Washington, D.C. and Damaskos of Boston pointed out, however, that the results described could be attributed to a hemolytic effect of the alcohol.

Jandl of Boston reported that reticulocytes

from several species of animals exhibited properties similar to those of antibody-coated red cells. They were selectively agglutinated by anti-globulin sera and were readily sequestered in the splenic pulp, but there was no evidence of destruction of reticulocytes in the spleen as a result of sequestration. Reticulocytes and various types of abnormal human red cells were subjected to filtration through Millipore filters with a pore size of 5.5 microns and at various pressures. Sickled cells and spherocytes were readily separated from normal red cells which passed through the pores more easily. Reticulocytes and antibody-coated cells suspended in plasma + PVP fibrinogen passed through the filter only when pressures above 8 to 10 mm. Hg were applied to dissociate the cell aggregates. Still higher pressures were required to force through the filter red cells agglutinated by "complete" antibodies. Jandl concluded that sites of sequestration of immature, abnormal or agglutinated red cells may be determined chiefly by pore size and perfusion pressures of vascular filter beds in various parts of the body, such as spleen and liver.

Griggs and Harris of Cleveland demonstrated shortened survival of autotransfused red cells tagged with Cr⁵¹ in 4 adult males who suffered lead intoxication from industrial exposure. Further studies on persons with a history of exposure to lead revealed increased excretion of delta-aminolevulinic acid in the urine even when the excretion of coproporphyrin was normal. These results point to a sensitive test to aid in detection of lead intoxication. In discussing this paper, Cartwright of Salt Lake City expressed the opinion that a block in incorporation of Fe in protoporphyrin might explain all of the known biochemical abnormalities in lead poisoning.

Schrier and Kellermeyer of Chicago found increase in aldolase activity in hemolysates prepared from 10 primaquine-sensitive persons as compared with those from 13 normal persons. They postulate that the primaquine-sensitive red cells with genetically determined deficiency in glucose-6-phosphate dehydrogenase could utilize energy sources of anaerobic glycolysis more effectively with the aid of increased aldolase. Normal life span of the cells could thus be maintained unless the cells were challenged by primaquine or a related drug.

Thomas, Lochte, Jaretzki, Ashley and Sahler of Cooperstown reported studies with homografts of bone marrow in dogs after lethal total-

body radiation. Resistance to grafts was overcome by increasing dose of radiation beyond LD₁₀₀ range, by splenectomizing recipients and giving ACTH before radiation and by giving large doses of marrow. Successful grafts were demonstrated by return to peripheral blood of all three formed elements and by an appearance of female leukocytes in male dogs that received marrow from female donors. Donor red cells might be identified on the basis of blood group differences. The chief cause of death in the irradiated dogs is infection due to loss of immune responses. Transplantation of splenic tissue from both adult and fetal donors is being tried as a means of re-establishing resistance to infection.

There was general agreement among the numerous discussants of this paper with regard to technical difficulties involved in any type of marrow transplant.

*Lawrence E. Young
Strong Memorial Hospital
Rochester, New York*

Section V

There was a good attendance at the meeting of the subsection on infectious diseases where 8 papers were presented and discussed. The experience of the audience spanned the last thirty years in this field. This vast knowledge was reflected in the discussion. The subject matter presented varied from the social aspects of infectious diseases to considerations of molecular activity.

Christensen presented the experience of the Cornell group in their study of a group of Hungarian refugees. He emphasized the relationship of life experiences to illness. The discussion was active, provocative and particularly stimulating in the area of experimental design. There was considerable comment on the dangers of the use of anamnesis in studies of this type. The discussants pointed out the complicated interrelationship of environmental sanitation, diet and stress in the pathogenesis of infectious diseases. The paper and discussion points to a large field for future study in infectious diseases and the need for critical judgement and protocol in order to prevent a repetition of the errors of the late nineteenth and early twentieth century when bacteria were being established as etiologic agents of disease.

Other papers dealt with hormones and susceptibility, latent infections, cross resistance and passive immunity. Immunologic mechanisms in

fever production were discussed. The experiences of McCrum and the Maryland group in the recent Asian influenza epidemic were presented and the findings were discussed and compared with those of Dingle of Western Reserve and Rogers of Cornell. All papers stressed the importance of host response in infectious diseases.

Dr. Alexis Shelokov presented his findings of hemadsorption in tissue culture. This technic will aid immeasurably in the study of viral diseases.

While the discussion was lively and critical, it is hoped that in future years the analysis of the papers will become more detailed and piercing. In this day of rapid fire presentation of papers, critical evaluation has become a lost art. With the discussion period lasting as long as the presentation, this art may be rejuvenated and again become a part of the medical scientific meetings.

Samuel P. Martin
Department of Medicine
University of Florida College of Medicine
Gainesville, Florida

Section VI

Section VI met in the West Room at Haddon Hall at 2:30 P.M., Sunday, May 4, 1958. An audience of 225 packed the hall to capacity. Nine papers were presented, five submitted to the American Federation for Clinical Research and four to the American Society of Clinical Investigation. The first four papers dealt with liver disease and bilirubin metabolism. The quality of these presentations was of a very superior grade, and the discussion was led by a group of eminent investigators in these fields who came to this meeting of their own accord. The discussion was lively, crisp and designed to be informative.

The remainder of the program dealt more strictly with the gastrointestinal tract. The presentations were somewhat variable in quality, but I believe all but one were superior. Discussion was generally good, and never verbose. The meeting ended at 5:00 P.M.

This meeting proved that tandem discussion is certainly preferable to discussions in which the essayist tabulates a list of questions from various people before answering any one of them. It was also clearly shown that ten minutes is more than ample time in which to extract in discussion the meat of a ten-minute paper, since

it is safe to say that the first five minutes of the discussion period contained all the really important questioning. From the standpoint of the chairman, this meeting proved to be a pleasure in all respects.

Albert I. Mendeloff
Sinai Hospital
Baltimore, Maryland

Section VII

The central theme of the Section VII meeting was "the role of research in undergraduate medical education." Abstracts were submitted through regular channels and selected for presentation in the usual fashion. However, most of the papers were solicited by the chairman in an attempt to contain the subjects for discussion within some easily encompassable framework. Most of the presentations were excellent and reflected the critical approach of several medical schools to the problems of medical student research. Data were presented which had been carefully collected and analyzed. Although it was obvious that better methods of evaluation are required, certain patterns emerged that to my eye were strikingly similar for schools with very different traditions.

It is now abundantly clear that the last decade has seen a spontaneous upsurge of research interest among medical students throughout the country. Whether we like it or not, research is a part of the medical curriculum because of student demand. Therefore, the vast majority of students at Yale gladly accept the thesis requirement for the M.D. degree (Ebbert), and the Albany Medical College has more applicants for summer research scholarships than can be supported (Nelson). Harvard has used a tutorial system to stimulate interest in research and waives certain required clinical courses to provide additional time for original investigation (Villee). N.Y.U. has developed an extremely ambitious "honors program" to attract better students for academic careers. Although too early to evaluate, the N.Y.U. program has been a great success if judged by faculty enthusiasm (Stetson). Rochester has made the most careful analysis of the careers of its former student research fellows and the motivations which led them to interrupt their regular medical training for a period of basic science training (Fenninger).

In all fairness it should be stated that the symposium was not an unqualified success be-

cause the habit of doing research on research is not yet firmly ingrained. But a promising start has been made. The discussions were spirited and indicated that the many members and guests of the two societies who attended the meeting wanted additional data on which to base their opinions. A time may come, hopefully, when members of the audience whose papers were not selected for presentation at the medical education subsection will "happen" to have a few slides in their pockets.

Should the American Federation for Clinical Research and the American Society for Clinical Investigation continue to sponsor these meetings on medical education? I believe it is their responsibility to do so. However, as scientific societies they should demand that these symposia be based on factual data submitted for critical examination in the same spirit as other scientific papers. If such a standard could be set, it would be of inestimable value to medical education. At present, most discussions of medical education are

based on hearsay, fraught with preconceptions and conducted on the unscientific plane of authoritarian debate. The scientist, outside of his own little bailiwick, is usually the worst offender. Contrary to lay (scientific) opinion, there are data available on many aspects of medical education that are crying for critical analysis and that are often of considerable import to the clinical investigator and teacher. The quality of candidates seeking admission to medical schools, for example, is a subject for a symposium which bears directly on the future of scientific medicine. If the clinical investigator forfeits his right to appraise medical education, it would (and should) go to the administrator by default. We have our precious "academic freedom" only to the extent to which we accept our "academic responsibility."

Robert R. Wagner
Johns Hopkins University School of Medicine
Baltimore, Maryland

1958 Membership Roster

of the

American Federation for Clinical Research

No Asterisk—Regular Member

* Associate Member

** Senior Member

ALABAMA

Claude M. Holland, Jr., 329 E. 10th St., Anniston.
James B. McLester, ** P. O. Box 6161, University.
Major Shih Y. Tsai, M. C., U. S. Army Hosp., Ft. Rucker.

Birmingham

Keehn Berry, Jr., 1815 11th Ave. So.
Charles B. Crow, 109 Montevallo Lane.
E. E. Eddleman, Jr., V.A. Hosp., 700 So. 19th St.
William H. Frederick, 2830-10th Court, So. (A-9).
Louis L. Friedman, ** 1906 9th Ave., S.
Walter B. Frommeyer, Jr., ** Med. Coll. of Alabama.
William J. Hammack, 1643 Cahaba Rd.
Tinsley R. Harrison, ** The Med. Coll. of Alabama, Univ. of Alabama.

S. Richardson Hill, Jr., 3337 Briarclif Rd.
Howard L. Holley, ** 620 So. 20th St.
William B. Jones, 2251 Highland Ave.
Stanley S. Kahn, 811 So. 20th St.
Charles B. McCall, 1837 Montclaire Dr.
H. V. Murdaugh, Jr., V.A. Hosp., 700 So. 19th St.
James A. Pittman, Jr., 1006-19th St. So.
Thomas J. Reeves, Dept. of Med., Med. Coll. of Alabama.
Leon Smelco, ** 1005 S. 21st St.
Soon Kyu Suh, V.A. Hosp., 700 So. 19th St.
Henry D. Thomas, 1631 A Valley Ave.

ARIZONA

Meyer Markowitz, 725 West Lewis, Phoenix.

ARKANSAS

Little Rock

Willis E. Brown, ** Univ. Hosp.
James E. Doherty, III, 317 So. Elm St.

Richard V. Ebert, ** 6 Virginia Lane.

Ben I. Heller, ** Univ. of Arkansas School of Med.
Kerrison Juniper, Jr., Univ. of Arkansas Med. Center.
Kermit E. Krantz, Univ. of Arkansas Med. School.
S. William Ross, 15 Pine Manor Dr.
Bill D. Stewart, 8 McKinley Circle.
Eugene J. Towbin, Research Lab., V.A. Hosp., Roosevelt Rd.

CALIFORNIA

Thomas W. Adams, 41st and Jay St., Sacramento.
Charles D. Armstrong, 1111 University Dr., Menlo Park.
William A. Atchley, 26 Peninsula Rd., Belvedere.
Harry E. Balch, ** P. O. Box 1045, Lafayette.
William F. Benthard, ** The Scripps Metabolic Clinic, La Jolla.
Howard R. Bierman, ** City of Hope Med. Center, Duarate.
Max W. Biggs, 310 Los Lomitas Dr., Pleasanton.
Ernest Bors, ** V.A. Hosp., Long Beach.
Robert I. Boyd, ** 960 E. Green St., Pasadena 1.
John Welch Brown, ** 52 Oak Dr., Orinda.
Ralph L. Byron, Jr., ** 220 W. Orange Grove Ave., Arcadia.
Espey F. Cannon, ** 2 W. Fern Ave., Redlands.
David B. Carmichael, 6529 La Jolla Blvd., La Jolla.
Burt Cochran, Jr., 1778 Alta Crest Dr., Altadena.
Gilbert C. Cochrane, 128 Caper-ton Ave., Piedmont.
Robert C. Cogswell, ** 1930 4th St., San Rafael.
Morris F. Collen, ** 4155 Walnut Blvd., Walnut Creek.
Clarence R. Collier, Coll. of Med. Evangelists, Loma Linda.
Robert S. Cox, Jr., 111 Richard-son Dr., Mill Valley.
Neil E. Crow, Box 37, 2349th

U.S.A.F. Hosp., Parks Air Force Base.

C. A. Domz, 317 West Pueblo, Santa Barbara.

William R. Dorrance, 1155 Saint Francis Way, San Carlos.

Edmund Lawrence Dubois, 201 So. Lasky Dr., Beverly Hills.
Carl L. Ebnothor, 261 Hamilton Ave., Palo Alto.

Ephraim P. Engleman, ** 140 E. Poplar Ave., San Mateo.

Edward R. Evans, 47 Congress St., Pasadena 2.

Elliston Farrell, ** 911 E. San Antonio Dr., Suite 1, Long Beach 7.

Cutting B. Favour, ** 300 Homer Ave., Palo Alto.

Sydney M. Finegold, 6931 Geyser Ave., Reseda.

Saul Friedlander, ** 2728 Capitol Ave., Sacramento 16.

Emanuel Friedman, 1480 Crestwood Dr., San Bruno.

Herman F. Froeb, 7951 Avenida Alamar, La Jolla.

Albert I. Gazin, ** 743 Pismo, San Luis Obispo.

Ralph Goldman, V. A. Hosp., Sepulveda.

Herbert J. Grossman, 8743 Arcadia Ave., San Gabriel.

Paul H. Guth, Orange County Gen. Hosp., Orange.

Lt. Max B. Hagedorn, * M. C., U. S. Naval Hosp., San Diego.

Col. James H. Hammond, ** USAF, MC, 3275th USAF Hosp., Parks Air Force Base

Denham Harman, 11 Las Palmas, Orinda.

Alexander Hatoff, ** 12 Glen Alpine Rd., Piedmont 11.

Bernard J. Haverback, 4923 Laurel Canyon Blvd., No. Holly-wood.

Lloyd T. Iseri, 9260 Gainford St., Downey.

James S. L. Jacobs, ** 4835 Van Nuys Blvd., Sherman Oaks.

Robert W. Jampolis, 300 Homer Ave., Palo Alto.

Richard B. Johnson, 398 De Arza, San Carlos.

D. G. Johnston, 125 Mills Rd., Ventura.

John V. Kelly, 1147 6th St., Santa Monica.
 Keith H. Kelly,** City of Hope Med. Center, Duarte.
 Bruce J. Kessler, 206 E. Las Tunas, San Gabriel.
 Karl P. Kolb, 4th and Morro Sts., Morro Bay.
 Marcus A. Krupp,** 300 Homer, Palo Alto.
 Nathaniel B. Kurnick, 5901 E. 7th St., Long Beach 4.
 William J. Kuzman, 312 San Cola St., La Jolla.
 Sanford Hull Lawrence, 6654 Alta Loma Terrace, Hollywood 28.
 Philip R. Lee, Palo Alto Clinic, 300 Homer Ave., Palo Alto.
 Charles L. Leftwich, 235 E. Santa Clara St., San Jose 13.
 Bernard I. Lewis,** 300 Homer Ave., Palo Alto.
 Daniel Liebowitz, 335 Laning Dr., Woodside.
 Richard W. Lippman,** 414 No. Camden Dr., Beverly Hills.
 Alfred Lui,* Route 2, Box 148, San Luis Obispo.
 Rollin K. McCombs, 1802 Tulane Ave., Long Beach 15.
 Georges F. McCormick, Box 166, Ben Lomond.
 Herbert I. McCoy, 6515 La Jolla Blvd., La Jolla.
 Teresa McGovern,** 259 Meridian Rd., San Jose 26.
 M. Sydney Margolese,** 436 N. Roxbury Dr., #208, Beverly Hills.
 Helen E. Martin,** 413 Scott Pl., Pasadena.
 Edmund A. Massullo, 2349th U.S.A.F. Hosp., Parks Air Force Base.
 Thomas R. Meagher, 1131 Oakland Ave., Piedmont.
 Willard Merle Meininger,** 2615 Eye St., Sacramento.
 Frank M. Morgan, Suite 207, 540 No. Central Ave., Glendale 3.
 William B. Neal, Jr., 4708 Ashland Ave., La Canada.
 John R. Newkirk, 595 Estudillo Ave., San Leandro.
 Norman Nomof, 48 E. Santa Clara St., San Jose.
 Donald W. Petit,** 960 E. Green St., Pasadena.
 Raymond W. Pickering, 606 E. 7th St., Upland.
 Frank T. Pierce, Jr., 1010 Cove Way, Beverly Hills.
 J. A. Polhemus, 1759 Fulton St., Fresno.
 Phillip Raimondi,** 519 Magnolia Ave., Piedmont 11.
 Walter C. Ralston, 1701 So. Euclid, Anaheim.
 Frederick M. Rarick, 3509 Elm Ave., Manhattan Beach.
 Richard N. Reedy, 1319 1/2 A St., Hayward.

Roberts M. Rees, The Beverly Hills Clinic, 133 So. Lasky Dr., Beverly Hills.
 R. John F. Renshaw,** 1527 No. Broadway, Santa Ana.
 H. Schuyler Robertson, 38 N. San Mateo Dr., San Mateo.
 Edward C. Rosenow, Jr.,** 65 No. Madison Ave., Pasadena 1.
 Edward Rubenstein, 34 San Mateo Dr., San Mateo.
 Arthur J. Samuels, 416 No. Bedford Dr., Beverly Hills.
 James H. Sands, Magan Med. Clinic, 155 W. College, Covina.
 Samuel O. Sapin, 5310 Wortser Ave., Van Nuys.
 John F. Scholer, 300 Homer Ave., Palo Alto.
 Edward Shanbrom, City of Hope Med. Center, Duarte.
 Martin A. Shearn, 1815 Arlington Ave., El Cerrito.
 George L. Shmagranoff, 155 Birch St., Redwood City.
 Bawa P. Singh, 15506 So. Normandie Ave., Gardena.
 Jonas H. Sirota,** 120 No. 4th St., San Jose.
 William A. Skoog, 14601 Drummond St., Pacific Palisades.
 Stephen Smith III,** 2900 Blanche St., Pasadena 10.
 George G. Snively, 2315 Stockton Blvd., Sacramento 17.
 Suzanne A. Snively, 2315 Stockton Blvd., Sacramento 17.
 David H. Solomon, 613 N. Palm Dr., Beverly Hills.
 Paul Starr,** 1199 Lida St., Pasadena.
 Carlyle F. Stout, 960 E. Green St., Pasadena 1.
 Kouichi R. Tanaka, 2929 Virginia Ave., Santa Monica.
 William W. Thayer, 530 Chesterton Ave., Belmont.
 Willard P. VanderLaan,** 8275 La Jolla Shores Dr., La Jolla.
 George F. Warner, Orange County Gen. Hosp., Orange.
 Max H. Weil, Chief, Section of Cardiology, City of Hope Med. Center, Duarte.
 Howard J. Weinberger,** 105 No. San Vicente Blvd., Beverly Hills.
 Harry A. Weiss,** 1079 Devonshire Dr., San Diego 7.
 Raymond E. Weston, 315 So. Elm Dr., Beverly Hills.
 Sidney G. White, 21822 Sherman Way, Canoga Park.
 Willard J. Zinn, 828 N. 2nd St., Alhambra.

Berkeley

Henry B. Bruyn, 26 Sunset Dr.
 Franz Rudolph Goetzl,** 2622 Piedmont Ave.
 John R. Goldsmith, Bureau of Chronic Dis., California Dept. of Public Health.

John Hundale Lawrence,** Donner Lab. Med. Physics, Univ. of California.
 Leon Lewis,** 2380 Ellsworth St. Harold Mankin, 809 Cragmont Ave.
 Sheldon Margen, 2380 Ellsworth St.
 Morton A. Meyer,** 2884 Telegraph Ave.
 Nello Pace,** Div. of Physiology, Univ. of California.
 Myron Polycove,* Donner Lab., Univ. of California.
 Paul J. Sanazaro, 743 Spruce St.
 Charles E. Smith,** School of Public Health, Univ. of California.

Los Angeles

N. S. Assali,** Univ. of California School of Med.
 Donald C. Balfour, Jr.,** 2010 Wilshire Blvd.
 Franz K. Bauer,** Chief, Out-patient Services, Los Angeles County Gen. Hosp., 1200 No. State St.
 Paul M. Beigelman, Univ. of Southern California Med. School, 1200 No. State St.
 William H. Blahd, V. A. Center, Wilshire and Sawtelle Blvds.
 David H. Blankenhorn, Univ. of Southern California, 1200 No. State St.
 E. Raymond Borun, 11944 Foxboro Dr.
 Josiah Brown, Dept. of Med., U. C. L. A. Med. Center.
 Boris Catz, Dept. of Med., Univ. of Southern California, 1200 No. State St.
 Robert R. Commons, 1136 W. 6th St.
 Charles G. Craddock, Jr., Univ. of California Med. Center.
 Milton G. Crane, Coll. of Med. Evangelists, 1720 Brooklyn Ave.
 Harry A. Davis,** 2010 Wilshire Blvd.
 Seymour Dayton, Dept. of Med., Univ. of California Med. Center.
 Loren T. De Wind,** 1136 W. 6th St.
 William Joseph Dignam, Univ. of California Med. Center, School of Med.
 Albert H. Domm,** 5757 Wilshire Blvd.
 Stephen R. Elek,** 6423 Wilshire Blvd.
 John B. Field, Univ. of Southern California, School of Med.
 Ernest Geiger,** 4233 Don Ortega Pl.
 Aram Glorig,** 111 No. Bonnie Brae St.
 Irving Gordon,** Dept. of Med. Microbiology, Univ. of South-

ern California School of Med., University Park.
 Walter S. Graf, 3731 Stocker St.
 Garth K. Graham, 1047 Gayley Ave.
 Paul O. Greeley, ** Univ. of Southern California, Student Health Service
 Morton I. Grossman, V.A. Center.
 Lucien B. Guze, Dept. of Med., Wadsworth V. A. Hosp., Wilshire and Sawtelle Blvds.
 Varner J. Johns, Jr., Dept. of Int. Med., Coll. of Med. Evangelists Sch. of Med., 1720 Brooklyn Ave.
 Paul H. Jordan, Jr., Wadsworth Veterans Hosp.
 Albert A. Kattus, Jr., 5913 W. 74th St.
 Nobuyuki Kawata, * 4070 Buckingham Rd.
 Charles R. Kleeman, V. A. Center and Hospital-Dept. of Med., Wilshire and Sawtelle Blvds.
 Benjamin Kondo, ** 3627 Brooklyn Ave.
 John S. Lawrence, ** Dept. of Med., School of Med., Univ. of California Med. Center.
 Peter V. Lee, U. S. C. School of Med., 2025 Zonal Ave.
 Alan N. Leslie, ** 525 N. Saltair Ave.
 Jack J. Lewis, U. S. C. Med. Res. Bldg., 2025 Zonal Ave.
 Jacob Lichstein, ** 6360 Wilshire Blvd.
 James V. Maloney, Jr., Dept. of Surgery, U. C. L. A. Med. Center.
 Noble S. R. Maluf, ** Dept. of Urology, Kaiser Foundation Hosp., 4867 Sunset Blvd.
 Theodore B. Massell, ** 6221 Wilshire Blvd.
 Morton H. Maxwell, 621 Stone Canyon Rd.
 Sherman M. Mellinkoff, 1049 Selby Ave.
 William E. Molle, ** 751 Holmby Ave.
 J. George Moore, Univ. of California Med. Center, School of Med.
 Lester M. Morrison, ** 6317 Wilshire Blvd., Suite 302.
 Hurley L. Motley, ** 2003 N. Serrano Ave.
 Richard E. Ottoman, ** Dept. of Radiology, Univ. of California School of Med., 405 Hilgard Ave.
 Morton L. Pearce, Cardiology Section, V.A. Hosp.
 Seymour M. Perry, U. C. L. A. Med. Center.
 Edward Phillips, ** Suite 604, 6221 Wilshire Blvd.

William W. H. Pote, Jr., 1720 Brooklyn Ave.
 Allan G. Redeker, Los Angeles County Hosp., 1200 No. State St.
 Paul E. Rekers, ** 883 Linda Flora Dr.
 Telfer B. Reynolds, Dept. of Med., Univ. of Southern California, 1200 No. State St.
 Joseph F. Ross, ** U. C. L. A. School of Med.
 Keith P. Russell, ** The Moore-White Clinic, 511 So. Bonnie Brae St.
 Benjamin Simkin, 6423 Wilshire Blvd.
 Daniel H. Simmons, V.A. Center.
 Robert F. Skeels, The Shelton Clinic, 12300 Wilshire Blvd.
 Lloyd Stirrett, ** 10962 Le Conte Ave.
 Charles B. Stone, 1963 Benicia, J. W. Stutzman, ** 8480 Beverly Blvd.
 Chun-I Wang, 16336 Kalisher St., Granada Hills.
 Irwin M. Weinstein, Wadsworth Gen. Hosp., V.A. Center.
 Travis Winsor, ** 3875 Wilshire Blvd., Suite 500.
 Paul K. Yamauchi, ** 1707 6th Ave.
 Eric T. Yuhl, 1486 Glendon Ave.

Oakland

Capt. T. D. Cuttle, MC, USN, Chief of Med., U. S. Naval Hosp.
 Lt. Paul Doolan, MC USN, U. S. Naval Hospital.
 Paul F. Flynn, 371 Vernon St.
 Mervin J. Goldman, ** V.A. Hosp.
 A. Gerson Hollander, ** V. A. Hosp., 13th and Harrison Sts.
 Laurence W. Kinsell, ** Inst. for Metabolic Research, Highland Alameda County Hosp., 2701-14th Ave.
 Eli R. Movitt, ** V. A. Hosp., 13th and Harrison Sts.
 Robert J. Parsons, ** Highland Hosp., 2701 14th Ave.
 George H. Reifenstein, ** 6361 Ascot Dr.
 Edgar Rosen, 447 29th St.
 Joseph F. Sadusk, Jr., ** 459 30th St.
 Edgar J. Schoen, The Permanente Med. Group, 280 W. MacArthur Blvd.

San Francisco

Paul M. Aggeler, ** 655 Sutter St.
 Robert H. Alway, ** Dept. of Pediatrics, 2351 Clay St.
 Richard C. Bentinck, 1479 Funs-ton Ave.
 John C. Bettinger, Cardiovascu-

lar Research Unit, Univ. of California Hosp.
 Gerson R. Biskind, ** 450 Sutter St.
 Melvin B. Black, 3370 Washington St.
 Lenore A. Boling, 847-43rd Ave.
 Warren L. Bostick, ** Univ. of California Med. School.
 Henry D. Brainerd, ** Univ. of California Hosp. Med. Center.
 Ellen Brown, ** Dept. of Med., Univ. of California Hosp., Med. Center.
 John V. Carbone, Dept. of Med., Univ. of California Med. Center.
 Alfred W. Childs, 490 Post St.
 Robert H. Crede, ** Univ. of California Hosp.
 William P. Creger, Dept. of Med., Stanford Univ. School of Med.
 Isidore S. Edelman, Univ. of California Med. Service, San Francisco City and County Hosp., Potrero and 23rd Sts.
 Frederic Louis Eldridge, Stanford Univ. Hosp., Clay and Webster Sts.
 Maurice Eliaser, Jr., ** 655 Sutter St.
 Henry Wood Elliott, Div. of Pharmacology, Univ. of California Med. School.
 Seymour M. Farber, ** 2255 Van Ness Ave.
 John W. Farquhar, 115 Quintara St.
 Thomas V. Feichtmeir, ** 42nd Ave. and Clement St.
 Sanford E. Feldman, ** 3627 California St.
 Peter H. Forsham, ** Metabolic Unit, Univ. of California Hosp.
 John R. Gamble, 850 26th Ave.
 Gilbert S. Gordan, Jr., ** Univ. of California Hosp.
 Francis S. Greenspan, 490 Post St., Suite 603.
 Ruth T. Gross, Pediatrics Dept., Stanford Univ. Med. School.
 Byron E. Hall, ** 909 Hyde St.
 Richard J. Havel, Univ. of California Med. Center.
 Frank Hinman, Jr., ** Univ. of California School of Med., 3rd and Parnassus Ave.
 James Hopper, Jr., ** Central Lab., Univ. of California Hosp.
 Col. Frederic J. Hughes, Jr., MC USA, ** Box 75, Letterman Army Hosp.
 Herbert N. Hultgren, Stanford Univ. School of Med., Clay and Webster Sts.
 Ben B. Johnson, Stanford Univ. School of Med., 2398 Sacramento St.
 Sumner M. Kalman, 563-15th Ave.
 Hilliard J. Katz, 450 Sutter St.

Frank J. Kelly, 2425 Geary Blvd.
Felix O. Kolb, 3611 California St.
V. C. Larson, ** 555 Buena Vista Avenue West.
Sanford E. Leeds, ** 3440 Washington St.
Jonah G. Li, 1306 Shrader St.
Stuart Lindsay, ** Univ. of California, School of Med.
Charles E. McLennan, ** Dept. of Obstetrics and Gynecology, Stanford Univ. Hosp.
William Mandel, 659 Guerrero St.
Harold W. March, Cardiovascular Res., Stanford Univ. Hosp., Clay and Webster Sts.
Stacy R. Mettler, ** 40 Scenic Way.
Earl R. Miller, ** 55 Ashbury Terr.
Hugo C. Moeller, Univ. of California Med. Center.
Henry D. Moon, ** Pathology, Univ. of California Med. School.
Grant Morrow, ** 909 Hyde St.
H. W. Newman, ** Stanford Univ. Hosp.
Major Stanley Newman, 062965, MC, 1574-B Pershing Dr., Presidio of San Francisco.
Ernest W. Page, ** % Div. of Obstetrics and Gynecology, Univ. of California, School of Med.
Herbert A. Perkins, 2398 Sacramento St.
Nicholas L. Petrakis, School of Med., Cancer Res. Inst., Univ. of California Med. Center.
Major Forrest W. Pitts, MC, 059747, Letterman Army Hosp.
K. Peter Poirier, Suite #916, 450 Sutter St.
Lowell A. Rantz, ** Stanford Univ. School of Med., 2398 Sacramento St.
Elliot Rapaport, Director, Cardiopulmonary Lab., Mt. Zion Hosp.
Robert S. Reiss, ** 655 Sutter St.
J. Alfred Rider, Dept. of Med., Univ. of California Hosp.
Kathleen E. Roberts, U. S. Public Health Service Hosp., 15th Ave. and Lake St.
Saul Joel Robinson, ** 2215 Post St.
Milton L. Rosenberg, 3637 California St.
Harold Rosenblum, ** 450 Sutter St.
Ray H. Rosenman, Harold Brunn Inst., Mt. Zion Hosp., 1600 Divisadero St.
David A. Rytand, ** Stanford Univ. Hosp.
Victor M. Shorov, Dept. of Med., Univ. of California Hosp.
Arthur Selzer, ** 450 Sutter St.

Maurice Sokolow, ** 3452 Jackson St.
Reinhard S. Speck, Div. of Microbiology, Univ. of California, School of Med.
Louis A. Strait, ** 204 Grand View Ave.
Norman J. Sweet, ** Univ. of California Hosp.
James H. Thompson, ** Room 735, 490 Post St.
Ralph O. Wallerstein, 2000 Van Ness Ave.
Edgar Wayburn, ** 490 Post St.
Ralph W. Weilerstein, ** U. S. Food and Drug Administration, 512 Federal Office Bldg.
Henry M. Weyrauch, ** Stanford Univ. School of Med., 2398 Sacramento St.
Laurens Park White, Dept. of Med., Stanford Univ. School of Med.
Roger H. L. Wilson, 2049 Leavenworth St.

COLORADO

Stanley B. Crosbie, ** V.A. Hosp., Grand Junction.
Russell W. Hibbert, Jr., ** 909 10th St., Greeley.
Harold D. Jourdan, 1801-17th St., Greeley.

Denver
Jerry K. Aikawa, Univ. of Colorado, School of Med., 4200 E. 9th Ave.
Martin M. Alexander, ** 425 Republic Bldg.
Leighton L. Anderson, ** 1919 So. Univ. Blvd.
James Carroll Bell, 4200 E. 9th Ave.
Willis L. Bennett, ** 736 Metropolitan Bldg.
Robert F. Berries, 1100 E. 18th Ave.
Edwin L. Bierman, 3606 Monaco St. Parkway.
Major Emil Blair, MC, U. S. Army Research and Development Unit, Fitzsimons Army Hosp.
S. Gilbert Blount, Jr., ** 4200 E. 9th Ave.
L. L. Brock, Dept. of Med., Univ. of Colorado Med. Center.
Paul D. Bruns, ** Dept. of Obstetrics and Gynecology, Univ. of Colorado School of Med.
Dumont Clark, ** 1731 Gilpin St.
Henry Clay Cleveland, 410 Holly.
Douglas Deeds, ** 700 Metropolitan Bldg.
Sidney H. Dressler, ** 1391 So. Fairfax St.
Ben Eiseman, 1055 Clermont St.
Giles F. Filley, ** Dept. of Med., Univ. of Colorado Med. Center,
4200 E. 9th Ave.
Reginald H. Fitz, Univ. of Colorado School of Med., 4200 E. 9th Ave.
John J. Franks, 1333 Adams St.
Goffredo G. Gensini, Cardiopulmonary Lab., National Jewish Hosp., 3800 E. Colfax Ave.
John H. Githens, 4200 E. 9th Ave.
Robert J. Glasser, Office of the Dean, Univ. of Colorado Med. Center, 4200 E. 9th Ave.
Eugene Hildebrand, ** Mercy Hosp., 1619 Milwaukee St.
William A. Hines, 416 Professional Arts Bldg., 1245 E. Colfax Ave.
Murray S. Hoffman, 1635 E. 18th Ave.
Joseph H. Holmes, ** Univ. of Colorado Med. Center, 4200 E. 9th Ave.
Elston R. Huffman, ** V. A. Hosp.
Dalton Jenkins, Univ. of Colorado School of Med., 4200 E. 9th Ave.
Frank T. Joyce, ** 144 So. Dexter St.
A. J. Kauvar, ** 315 Professional Arts Bldg., 1245 E. Colfax.
Fred Kern, Jr., Denver Gen. Hosp.
Sam A. Kinard, Jr., Univ. of Colorado Gen. Hosp. Med. Center-Dept. of Med., 4200 E. 9th Ave.
Hope Lowry, ** 4200 E. 9th Ave.
Frank B. McGlone, ** 1801 Williams.
Gordon B. Magill, 1122 Monaco Parkway.
Francis R. Manlove, ** Univ. of Colorado Med. Center, 4200 E. 9th Ave.
Edward S. Miller, ** 2035 E. 18th Ave.
James C. Owens, ** Univ. of Colorado Med. Center, 4200 E. 9th Ave.
Mordant E. Peck, ** Suite 208, Med. Center Bldg., 3705 E. Colfax Ave.
Lt. Col. Irvin C. Plough, Med. Nutrition Lab., Fitzsimons Army Hosp.
Elmer B. Pratt, ** 3135 So. Saint Paul.
Frederick J. Rachiele, ** 1055 Clermont St.
Abe Ravin, ** 45 S. Dahlia.
E. Paul Sheridan, ** 1776 Vine.
N. B. Slonim, 2975 So. Clermont.
Charley J. Smyth, ** Dept. of Med., Univ. of Colorado, 4200 E. 9th St.
John R. Spencer, 1829 High St.
Henry Swan, ** Dept. of Surgery, Univ. of Colorado School of Med., 4200 E. 9th Ave.

Milton N. Towbin, ** #6, 1820 Gilpin St.
 Kurt N. von Kaulla, ** Univ. of Colorado School of Med., 4200 E. 9th Ave.
 David H. Watkins, Denver Gen. Hosp.
 Stanley M. Weiner, 816 Republic Bldg.
 Col. James A. Wier, MC, ** Officers' Mail Section-Box 308, Fitzsimons Army Hosp.
 Thomas A. Witten, ** V.A. Hosp.

CONNECTICUT

Frank K. Abbot, 163 Grove St., Waterbury.
 Thomas T. Amatruda, Jr., Dept. of Med., V.A. Hosp., West Haven.
 John F. Beakey, 287 Collins St., Hartford.
 Paul Beres, Easton Rd., Westport.
 Paul Calabresi, Crescent Bluff Ave., Pine Orchard (Branford).
 Chester W. Fairlie, ** 85 Jefferson St., Hartford.
 George J. Friou, Green Hill Rd., Orange.
 E. C. Gaulden, 2 Seaview Ave., Branford.
 Robert Holt Green, ** R.F.D. #1, Madison.
 Paul H. Guilfoil, Longmeadow Rd., Orange.
 John H. Heller, New England Inst. for Med. Res., Ridgefield.
 Walter L. Herrmann, Petrose Circle, Orange.
 Martin S. Kleckner, Jr., 215 Washington St., Hartford 15.
 Joseph J. Kristan, 10 Middle Butcher Rd., Ellington.
 Harold J. Lehmus, 9 W. Middle Turnpike, Manchester.
 Tracy Levy, ** U. S. Coast Guard Academy, New London.
 Sung J. Liao, Dept. of Physical Med. and Rehabilitation, Waterbury Hosp., Waterbury.
 Charles D. Marple, ** 4 Deklyn Terr., Rowayton.
 Sylvester J. Ryan, * 135 W. Main St., Waterbury.
 William B. Scoville, ** 85 Jefferson St., Suite 401, Hartford 6.
 William E. Swift, Jr., ** 36 Morse St., Hamden 14.
 Clayton B. Weed, Jr., 21 Broad St., Stamford.
 Benjamin White, ** 85 Jefferson St., Hartford 6.
 William W. Zeller, The Inst. of Living, 200 Retreat Ave., Hartford 2.

New Haven

Margaret Joralemon Albrink, Dept. Int. Med., Yale Univ. School of Med.

Albert W. Barile, 310 Winthrop Ave.
 Philip K. Bondy, 789 Howard Ave.
 Jerome I. Brody, Dept. of Med., Yale Univ. School of Med., 333 Cedar St.
 David H. Clement, ** 240 Bradley St.
 George L. Cohn, Dept. of Int. Med., Yale Univ. School of Med., 333 Cedar St.
 Harold O. Conn, Dept. of Int. Med., Yale Univ. School of Med.
 Arthur Ebbert, Jr., 333 Cedar St.
 Franklin H. Epstein, Dept. of Int. Med., Yale Univ. School of Med., 333 Cedar St.
 Stuart C. Finch, New Haven Hosp.
 Stephen Fleck, ** Yale Univ. School of Med., 333 Cedar St.
 Lawrence Raphael Freedman, Dept. of Int. Med., Yale Univ. School of Med., 789 Howard Ave.
 M. Jay Goodkind, Dept. of Med., Grace-New Haven Community Hosp.
 Allan V. N. Goodyear, Dept. of Int. Med., Yale Univ. School of Med., 333 Cedar St.
 Martin E. Gordon, 111 Sherman Ave.
 Frank D. Gray, Jr., ** Yale Univ. School of Med.
 Frieda G. Gray, Yale Univ. School of Med.
 Herbert S. Harned, Jr., 789 Howard Ave.
 Mark A. Hayes, ** Yale Univ. School of Med., 333 Cedar St.
 Carl A. Jaeger, Yale Univ. School of Med., Dept. of Med.
 Kenneth G. Johnson, * 169 Bishop St.
 Gerald Klatskin, ** Dept. of Int. Med., Yale Univ. School of Med., 333 Cedar St.
 Howard Levitin, Dept. of Int. Med., Yale Univ. School of Med.
 Seymour R. Lipsky, * 114 Ward St.
 Donald P. Shedd, 1 So. St.
 Howard M. Spiro, 333 Cedar St.
 Virginia M. Stuermer, 42 Trumbull St.
 Willem Frederik Van Eck, ** Yale Univ. School of Med.
 William W. Winternitz, Dept. of Physiology, Yale Univ. School of Med.

DELAWARE

A. Henry Clagett, Jr., ** 1618 No. Broom St., Wilmington 6.
 Leonard P. Lang, ** 1009 Dela-

ware Ave., Wilmington 6.
 Armine T. Wilson, ** Alfred I. du Pont Inst. of The Nemours Foundation, Wilmington 99.

DISTRICT OF COLUMBIA

Washington

Edward Adelson, 1336 Missouri Ave., N. W.
 Louis K. Alpert, ** 2300 K St., N. W.
 Jeanne C. Bateman, ** 1816 R St., N. W.
 Leonard B. Berman, 1660-A Av. on Pl., N. W.
 Herbert A. Bloomer, Georgetown Univ. Hosp.
 Irving B. Brick, ** Dept. of Med., Georgetown Univ. Hosp.
 Randolph Kelley Brown, ** Freedmen's Hosp., 6th and Bryant Sts., N.W.
 Edward L. Buescher, Dept. of Virus Dis., Walter Reed Army Med. Center.
 John J. Canary, 3811 Beecher St., N. W.
 Michael A. Corrado, 2000 Connecticut Ave., N. W.
 William H. Crosby, ** Dept. Hematology, WRAIR, Walter Reed Army Med. Center.
 Martin M. Cummings, Director, Research Service, Rm. 890-J, V.A. Central Office.
 David S. Davis, Farragut Med. Bldg., 900 17th St., N. W.
 Arthur Dick, ** 1614 Rhode Island Ave., N. W.
 Benedict J. Duffy, Jr., Georgetown Univ. Hosp.
 Henry D. Ecker, ** 3701 Upton St., N.W.
 Jerome H. Epstein, 2025 Eye St., N. W.
 Clayton B. Ethridge, ** 915-19th St., N. W.
 John Evans, ** The George Washington Univ. Hosp., 23rd and Pennsylvania Ave.
 Joseph Francis Fazekas, ** District of Columbia Gen. Hosp.
 Lt. Col. Oscar Felsenfeld, MC, ** Walter Reed Army Med. Center.
 Frank A. Finnerty, Jr., D. C. Gen. Hosp.
 Edward Freis, ** V.A. Hosp., 2650 Wisconsin Ave., N. W.
 Adolph Friedman, Farragut Med. Bldg., 900 17th St., N.W.
 Margaret Elizabeth Grigsby, Dept. of Med., Howard Univ. School of Med.
 Charles R. L. Halley, ** 915 19th St., N.W.
 W. Proctor Harvey, Georgetown Univ. Hosp.
 Edward W. Hawthorne, 520 W. St., N. W., Coll. of Med., Howard Univ.

Walter Lester Henry, Jr.,** 4625 Blagden Ave., N.W.
Harold Hirsh, 2945 Brandywine St., N.W.
Harry A. Horstman,** 1835 Eye St., N.W.
William L. Howell,** Washington Clinic.
Charles A. Hufnagel,** Georgetown Univ. Hosp., 3900 Reservoir Rd.
Oscar B. Hunter, Jr.,** 915-19th St., N.W.
John B. Johnson,** Howard Univ. School of Med.
Donald H. Keller,** 1112 W St., N.W.
Robert T. Kelley, Georgetown Univ. Hosp., 3900 Reservoir Rd.
George A. Kelser, Jr., 5903 Devonshire Dr.
Jack Kleh, 915 19th St., N.W.
Laurence Harwood Kyle,** Georgetown Univ. Hosp.
James J. Leonard, 2401 Kenton Pl., S.E.
Peter C. Luchsinger, District of Columbia Gen. Hosp., 19th and E., S.E.
William West McClure, 1510-34th St., N.W.
Paul R. McCurdy, District of Columbia Gen. Hosp.
Benjamin Manchester,** 1716 Holly St., N.W.
Thomas W. Mattingly,** Walter Reed Army Hosp., Walter Reed Army Med. Center.
Arthur Merrill,** D.C. Gen. Hosp.
Richard J. Meyer, 4731 Massachusetts Ave., N.W.
R. Bretney Miller,** 1834 Eye St., N.W.
Kenneth M. Moser, 4002 E St., S.E.
Col. Walter H. Moursund, Jr., MC, USA** Office of Surgeon General, U.S. Army.
John A. Owen, Jr., V.A. Hosp.
Lt. Col. Loren F. Parmley, Jr., MC, Walter Reed Army Hosp., Walter Reed Army Med. Center.
Elbert T. Phelps,** Georgetown Univ. Hosp.
Andrew G. Prandoni,** 1150 Connecticut Ave., N.W.
Charles E. Rath, Georgetown Univ. Hosp.
John A. Reed,** 1720 Connecticut Ave., N.W.
Jack J. Rheingold,** 1601 Aronne Pl., N.W.
Roy E. Ritts, Jr., Georgetown Univ. School of Med., 3900 Reservoir Rd., N.W.
Monroe J. Romansky,** George Washington Univ. Hosp., 901-23rd St., N.W.
Paul J. Rosch, Dept. of Metabolism, Walter Reed Army Hosp., Walter Reed Army Med. Center.
John C. Rose, Georgetown Univ. Hosp.
Thomas S. Sappington,** Suite 301, 1025 Connecticut Ave., N.W.
Marcus Schaaf, District of Columbia Gen. Hosp.
George E. Schreiner, Dept. of Med., Georgetown Univ. Hosp.
Cyril A. Schulman, 1801 Eye St., N.W.
Roland B. Scott,** 1114 Girard St., N.W.
M. H. Stolar,** Washington Med. Bldg., 1801 Eye St., N.W.
Daniel Stowens, Armed Forces Pathology, Walter Reed Army Med. Center.
Herbert L. Tanenbaum, 5500 Chillum Pl., N.E.
Riley Fisher Thomas,** 1326 Girard St., N.W.
Howard E. Ticktin, District of Columbia Gen. Hosp., 19th and E., S.E.
A. Earl Vivino,** 2500 Wisconsin Ave., N.W.
Jacob J. Weinstein,** 900 17th St., N.W.
Irving W. Winik,** 3900 McKinley St., N.W.

FLORIDA

George L. Baum,** 600 Altara Ave., Coral Gables.
Barkey Beidleman, The Med. Center Clinic, 1750 No. Palafox, Pensacola.
Clarence Bernstein,** 740 Magnolia Ave., Orlando.
Henry R. Cooper, 2648 N. E. 26th Pl., Fort Lauderdale.
Willis F. Evans,** 2 Cousineau Rd., Warrington.
Jack Warren Fleming, 1750 No. Palafox St., Pensacola.
Sidney Grau, 530 6th Ave., So., Saint Petersburg.
George T. Harrell, Jr.,** Coll. of Med., Univ. of Florida, Gainesville.
David S. Howell, 3009 Alhambra Circle, Coral Gables 34.
Emil M. Isberg,** 5145 Lakeview Dr., Miami Beach 40.
Nathaniel Jones,** 1707 San Marco Blvd., Jacksonville.
Sherman R. Kaplan, 541 Lincoln Rd., Miami Beach.
S. D. Klotz,** 3206 Middlesex Rd., Orlando.
Victor H. Kugel,** 1700 Meridian Ave., Miami Beach 39.
Warren Lindau, 216 Miracle Bldg., Coral Gables 34.
Bertrand E. Lowenstein, 109 W. Nassau St., Lake City.

Samuel P. Martin,** J. Hillis Miller Health Center, Univ. of Florida, Gainesville.
David R. Moonaw, Med. Arts Bldg., Five Points, Jacksonville.
Harry Prystowsky, Univ. of Florida Med. School, Gainesville.
Arthur H. Raynolds,** 1401 Jungle Ave., Saint Petersburg 10.
Jack A. Rudolph,** 9990 N.E. 2nd Ave., Miami Shores 38.
John M. Rumball,** 1244 So. Alhambra Circle, Coral Gables 46.
Louis M. Sales,** 1204 Le Baron Ave., Jacksonville 7.
Philip Samet, 5951 Alton Rd., Miami Beach 40.
Murray Sanders,** Dept. of Microbiology, Univ. of Miami, P.O. Box 1438, South Miami 43.
John A. Shively, Manatee Memorial Hosp., Bradenton.
William W. Stead, J. Hillis Miller Health Center, Univ. of Florida, Gainesville.
Sidney Storch,** The St. James Bldg., Suite 424, Jacksonville 2.
William C. Thomas, Jr., Dept. of Med., Univ. of Florida, Gainesville.
Paul N. Unger,** 420 Lincoln Rd., Miami Beach.
Fred Wasserman, V.A. Hosp., Coral Gables.
William T. Williams, Mease Clinic, Dunedin.
Sorrell L. Wolfson, 319 W. Amelia Ave., Tampa 2.
Doran D. Zinner, Dept. of Microbiology, Univ. of Miami, 2017 Alhambra Circle, Coral Gables.

Miami

Martin S. Belle,** 1431 N. Bayshore Dr.
Harvey Blank, Univ. of Miami School of Med., Jackson Memorial Hosp.
Paul W. Boyles, 1901 S.W. 83rd Ave.
O. Whitmore Burtner,** 8500 Old Cutler Rd.
Chester Cassel, 1210 Huntingdon Bldg., 168 S.E. 1st St.
Gus George Casten, 550 Brickell Ave.
Jacob Colsky, 1980 Coral Way.
Morris M. Dick,** 3301 S.W. 18th St.
Martin E. Flipse, Jackson Memorial Hosp.
Anwar A. Hakim, 4482 W. Flagler St.
Francisco A. Hernandez,** 321 S.W. 43rd Ave.

A. Gorman Hills,** Jackson Memorial Hosp.
 Ralph Jones, Jr., Univ. of Miami School of Med., Jackson Memorial Hosp.
 Ulfar Jonsson, 8325 S. W. 118th Terrace.
 Benjamin G. Oren,** 1431 N. Bayshore Dr.
 Maurice Rich,** 1431 N. Bayshore Dr.
 Milton S. Saslaw,** National Children's Cardiac Hosp., 4250 W. Flager St.
 M. Murray Schechter, 2759 Coral Way.
 Peritz Scheinberg, The Institute, Jackson Memorial Hosp.
 Franz H. Stewart,** 803 Du Pont Bldg.
 Murray Mark Streifeld, Dept. of Bacteriology, Univ. of Miami School of Med. (Coral Gables Br.).

GEORGIA

Osler A. Abbott, Emory Univ. Hosp., Emory Univ.
 H. Eugene Brown,** Emory Univ. Clinic, P.O. Box 459, Emory Univ.
 John Fabian Busch,** 310 McDonald, Marietta.
 Robert P. Coggins, Suite 5, Med. Arts Bldg., Marietta.
 Gerald R. Cooper,** Communicable Disease Center, Hematology and Biochemistry Section, P. O. Box 185, Chamblee.
 Marion Cotten, Dept. of Pharmacology, Emory Univ. School of Med., Emory Univ.
 Avery L. Cotton, 817 Columbia Dr., Decatur.
 Edward R. Dorney, Dept. of Int. Med.-Cardiology, Emory Univ. Clinic, P. O. Box 459, Emory Univ.
 Abner Golden, Emory Univ. Hosp., Emory Univ.
 William A. Hopkins,** 835 W. Ponce de Leon Ave., Decatur.
 R. Bruce Logue,** Emory Univ. Hosp., Emory Univ.
 Spalding Schroder,** Emory Univ. Hosp., Emory Univ.
 Walter H. Sheldon,** Woodruff Bldg., Emory Univ. School of Med., Emory Univ.
 George L. Walker, Jr.,** 610 So. 8th St., Griffin.

Atlanta

Elbert B. Agnor,** 1211 W. Peachtree St., N. E.
 E. Napier Burson, Jr., 1083 W. Peachtree St.
 Thomas S. Claiborne,** 384 Peachtree St.

Milton H. Freedman, Suite 345, Baptist Professional Bldg., 340 Blvd., N. E.
 John T. Galambos, 1865 McJenkin Dr., N.E.
 Benjamin R. Gendel,** Dept. of Med., Glenn Bldg., Emory Univ. School of Med., 69 Butler St., S. E.
 Bernard L. Hallman,** 894 Barton Woods Rd., N. E.
 David E. Hein, 340 Blvd., N. E.
 Charles M. Huguley, Jr., 865 Clifton Rd., N. E.
 John Willis Hurst, 45 Blackland Rd., N. W.
 Alexander D. Langmuir,** 50 7th St., N. E., CDC.
 Clarence L. Laws,** 1293 Peachtree St., N. E.
 Bernard S. Lipman, Suite 428, Strickler Med. Bldg., 1293 Peachtree St., N. E.
 Arthur J. Merrill,** 35-4th St., N. E.
 Ralph A. Murphy, Jr., 442 Allison Dr., N. E.
 Purcell Roberts,** 1293 Peachtree St., N. E.
 Carter Smith,** 1210 Med. Arts Bldg.
 Leland E. Starr,** 2000 Palifox Dr., N. E.
 Hyman B. Stillerman,** 384 Peachtree St., N. E.
 Charles F. Stone, Jr.,** 42 W. Brookhaven Dr., N. E.
 Elbert P. Tuttle, Jr., Emory Univ. School of Med., 69 Butler St., S. E.
 Julius Wenger, V.A. Hosp., 5998 Peachtree Rd., N. E.
 Robert Lafayette Whipple, Jr.,** 502 Med. Arts Bldg., 384 Peachtree St.
 Joseph Seal Wilson, 35 4th St., N. E.
 Bernard P. Wolff,** 911 Med. Arts Bldg.
 Edgar Woody, Jr., 1211 W. Peachtree St.

Augusta

Louis L. Battey, 1407 Gwinnett St.
 Joseph G. Bohorfoush,** V. A. Hosp. (Annex).
 B. Shannon Gallaher, Med. Coll. of Georgia.
 Edwin C. Jungck, Suite 201, Med. Arts Bldg., 1467 Harper St.
 Harry Barron O'Rear, Med. Coll. of Georgia.
 C. Martin Rhode,** V.A. Hosp.
 Virgil P. Sydenstricker,** V.A. Hosp., Forest Hills Div.
 Corbett H. Thigpen, Univ. Hosp.
 Victor C. Vaughan, III, Med. Coll. of Georgia.

A. Calhoun Witham, Med. Coll. of Georgia.
 Claude-Starr Wright,** Dept. of Med., Med. Coll. of Georgia.

IDAHO

Maurice M. Burkholder,** 401 Idaho St., Boise.
 Clifford J. Edwards, Wallace Hosp. and Clinic, Wallace.
 Charles C. Johnson,** 1216 So. Arcadia, Boise.
 Bernard L. Kreilkamp,** 168 Pierce St., Twin Falls.
 Samuel M. Poindexter,** 105 N. 8th St., Boise.
 Burton R. Stein,** 307 Saint John's Way, Lewiston.
 Glenn Q. Voyles,** 1537 Addison Ave. East, Twin Falls.

ILLINOIS

David Ritch Barnum,** 636 Church St., Evanston.
 John A. Barrett, Jr., 3345th U.S.A.F. Hosp., Chanute Air Force Base.
 Lionel M. Bernstein, V.A. Hosp., Hines.
 George H. Berryman,** 1421 Maple Ave., Evanston.
 Arnold Black,** 1122 No. Lombard Ave., Oak Park.
 Robert F. Cech,* 105 So. Randolph St., Champaign.
 T. Howard Clarke,** 150 Woodley Rd., Winnetka.
 Marvin J. Colbert, 5721 Aubrey Terrace, Downers Grove.
 Arthur R. Colwell, Jr., 165 Green Bay Rd. 1, Wilmette.
 Robert L. Craig, 636 Church St., Evanston.
 George M. Cummins, Jr.,** 1039 Pine St., Winnetka.
 William J. Donnelly, P. O. Box 2401, Hines.
 Victor A. Drill,** Div. of Biological Res., G. D. Searle and Co., Skokie.
 Frank R. Elliott,** 874 Green Bay Rd., Winnetka.
 Peter J. Farago, 360 No. Mayflower Rd., Lake Forest.
 Sanford A. Franzblau, 106 Key stone Ave., River Forest.
 Homer B. Freese, Abbott Lab., No. Chicago.
 Robert P. Gilbert, Evanston Hosp., 2650 Ridge Ave., Evanston.
 Jay J. Gold, 1704 Monroe, Evanston.
 Edwin E. Goldberg, 3404 Christine Dr., Decatur.
 Julius Goldberg, 1234 So. Oak Park Ave., Berwyn.
 John S. Graettinger, 124 E. 6th St., Hinsdale.

Rodney P. Gwinn, 605 6th, Wilmette.

Francis J. Haddy, 114 So. George St., Mount Prospect. Carl R. Hines, 530 Winnetka, Winnetka.

George G. Jackson, 120 Mohawk Dr., Clarendon Hills.

Erwin Kammerling, 1015 No. Grove Ave., Oak Park.

Donald L. Kessler, 339 Jeffrey Lane, Northfield.

Daniel S. Kushner, 780 Rosewood, Winnetka.

Hyman S. Lans, 625 Roger Williams, Highland Park.

Jules H. Last, ** 426 Park Ave., Highland Park.

Stanley L. Leithold, 720 W. Lake St., Oak Park.

Mark Lepper, ** 327 Hampton Pl., Hinsdale.

Armand Littman, 555 Edgewood Pl., River Forest.

Gerald O. McDonald, 6739 Longmeadow, Lincolnwood.

Ernest G. McEwen, ** 2681 Sheridan Rd., Evanston.

William P. McKeever, 1230 Colgate St., Wilmette.

Emanuel E. Mandel, ** 435 Park Ave., Glencoe.

Alton J. Morris, Ridgely Bldg., Springfield.

Adrian M. Ostfeld, 525 E. Park Ave., Elmhurst.

Camer R. Paynter, ** 2514 Crosby St., Rockford.

Raymond Pearson, ** 1925 Hamilton Ct., Springfield.

Robert M. Poske, Box 44, V.A. Hosp., Hines.

Frederick W. Preston, ** 3 Kent Rd., Winnetka.

Emanuel M. Racher, 358 Dogwood, Park Forest.

Peter C. Rumore, ** Effingham.

Robert B. Rutherford, ** Med. and Surgical Clinic, 1002 N. North St., Peoria.

Edward F. Scanlon, 636 Church St., Evanston.

James A. Schoenberger, 527 No. Dover, La Grange Park.

Irwin Schultz, 414 No. Meridian Dr., Forrestal Village, No. Chicago.

Alan C. Siegel, 913 Greenwood Ave., Winnetka.

Irving F. Stein, Jr., 900 Elm Pl., Glencoe.

George C. Sutton, 636 Church St., Evanston.

Jerome M. Swarts, 105 Lakeside Pl., Highland Park.

Maurice H. Wald, ** 750 Green Bay Rd., Winnetka.

Eugene L. Walsh, ** 1130 Raleigh Rd., Glenview.

Harry A. Warren, ** 629 1st

Natl. Bank Bldg., Peoria. Irwin C. Winter, ** 712 Chatham Rd., Glenview.

Hyman J. Zimmerman, ** 846 No. Kenilworth, Oak Park.

Chicago

Stuart Abel, ** 700 Michigan Ave.

John D. Arnold, 950 E. 59th St.

Donald H. Atlas, ** 30 No. Michigan Ave.

Saul P. Baker, Dept. of Med., Chicago Med. School, 710 So. Wolcott Ave.

Reuben C. Balagot, 2415 No. Mango Ave.

Edward J. Beattie, Jr., Presbyterian Hosp., 1753 W. Congress St.

Gerald Herbert Becker, 2944 W. Rascher St.

William R. Best, 840 So. Wood St.

Ernest Beutler, 950 E. 59th St. Richard K. Blaisdell, Dept. of Med., Univ. of Chicago, 950 E. 59th St.

Harry A. Bliss, Dept. of Med., 840 So. Wood St.

Ben B. Blivaiss, ** The Chicago Med. School, 710 S. Wolcott Ave.

Craig W. Borden, ** V. A. Research Hosp., 333 E. Huron.

Martin Brandfonbrener, V. A. Research Hosp., 333 E. Huron St.

David Bronsky, 5649 No. Drake Ave.

James A. Campbell, 1753 W. Congress St.

Robert W. Carton, 5 S. Wabash Ave.

Joseph R. Christian, Dept. of Pediatrics, Stritch School of Med., 706 S. Wolcott St.

Harold W. Christy, ** 55 E. Washington St.

Charles B. Clayman, 950 E. 59th St.

Harley E. Cluxton, Jr., ** 700 No. Michigan Ave.

Clarence Cohn, ** Dept. of Biochemistry, Michael Reese Hosp.

Joseph V. Condon, * 6217 No. Canfield Rd.

Nicholas J. Cotsonas, Jr., Univ. of Illinois, Coll. of Med., 1853 W. Polk St.

Sydenham Cryst, 5429 Greenwood Ave.

David W. Cugell, Northwestern Univ. Med. School, 303 E. Chicago Ave.

Oscar F. Davis, 2331 E. 68th St.

Francesco del Greco, Passavant Memorial Hosp.

Raymond J. Dern, Stritch School of Med., 706 So. Wolcott Ave.

Dean F. Dimick, Univ. of Chicago Clinics, 950 E. 59th St.

Ralph E. Dolkart, ** 670 N. Michigan Ave.

Harry F. Dowling, ** Dept. of Med., Univ. of Illinois Coll. of Med.

David P. Earle, Jr., ** Med. School-Northwestern Univ., 303 E. Chicago Ave.

Shirl O. Evans, Jr., Dept. of Surgery, Univ. of Chicago Clinics, 950 E. 59th St.

Walter Feder, 950 E. 59th St.

Harold Feinberg, 5636 So. Kenwood Ave.

Charles L. Flanagan, 936 No. Lake Shore Dr.

Piero Pio Foa, ** Chicago Med. School, 710 S. Wolcott Ave.

Ben W. Fox, 111 No. Wabash Ave.

Ronald E. Fox, 111 No. Wabash Ave.

Irving A. Friedman, 1757 No. Natoma Ave.

Nicholas W. Fugo, ** Dept. of Obstetrics and Gynecology, Chicago Lying-in Hosp., Univ. of Chicago.

Mario Gaudino, Abbott Lab., International, Suite 1000, Merchandise Mart Plaza.

A. Robert Goldfarb, ** Chicago Med. School, 710 S. Wolcott Ave.

Morton A. Goldmann, 4554 Broadway.

J. Thomas Grayston, Dept. of Med., Univ. of Chicago.

Clifford W. Gurney, Dept. of Med., Univ. of Chicago Med. School.

Harold B. Haley, Loyola Univ. School of Med., 706 So. Wolcott Ave.

Buford Hall, Univ. of Illinois Research and Educ. Hosp., 1853 W. Polk St.

O. M. Haring, 111 No. Wabash Ave.

Wilson H. Hartz, Jr., 55 E. Washington St.

Paul Heller, ** V.A. Hosp., 820 So. Damen Ave.

George C. Henegar, ** V. A. Research Hosp., 333 E. Huron St.

Robert R. J. Hilker, ** 720 No. Michigan Ave.

David Y.-Y. Hsia, Director, Div. of Clin. Biochemistry, The Children's Memorial Hosp., 707 Fullerton Ave.

Hushang Javid, * Suite 1111, 25 E. Washington Blvd.

Philip N. Jones, 122 So. Michigan Ave.
 Richard J. Jones, 950 E. 59th St.
 Morris A. Kaplan,** 111 No. Wabash Ave.
 Eli M. Katz, 6247 No. Oakley.
 William F. T. Kellow, Univ. of Illinois Coll. of Med., 1853 W. Polk St.
 Harold Koenig, 170 E. Pearson St.
 Roy J. Korn, V. A. West Side Hosp., 820 So. Damen Ave.
 George Kroll, 3333 W. Peterson.
 Walter J. Kuhl, Jr., V. A. Research Hosp., 333 E. Huron St.
 Harold Laufman,** 720 No. Michigan Ave.
 A. R. Lavender, 950 E. 59th St.
 Harold P. Lazar, 3550 Pine Grove Ave.
 Howard A. Lindberg,** 670 N. Michigan Ave.
 James W. Linman, V. A. Research Hosp., 333 E. Huron St.
 Morris A. Lipton,** Director of Research, V. A. Research Hosp., 333 E. Huron St.
 Allan L. Lorincz, 8612 So. Kimbark Ave.
 John Louis, 10721 South Hoyne Ave.
 Aldo A. Luisada,** Div. of Cardiology, Chicago Med. School, 2755 W. 15th St.
 Irving Mack, 104 S. Michigan.
 Walter G. Maddock,** 250 E. Superior St.
 Jack Metcalf,** Michael Reese Hosp., 29th St. and Ellis Ave.
 Albert J. Miller, 30 No. Michigan.
 Robert C. Muehrcke, Dept. of Med., Presbyterian Hosp., 1753 W. Congress St.
 L. A. Nalefski,** 104 S. Michigan Ave.
 Albert H. Niden, Dept. of Med., The Univ. of Chicago, 950 E. 59th St.
 William R. O'Connor, 6516 No. Chicora Ave.
 Robert Griffith Page, Dept. of Med., Room W. 604, Univ. of Chicago.
 Luke Pascale, 40 E. 118th Pl.
 Jerome Paul,** 8 S. Michigan Ave.
 John E. Pauly, Chicago Med. School, 710 So. Wolcott Ave.
 David T. Petty, V. A. Hosp.-Dept. of Surgery, 820 So. Damen Ave.
 Ruth Pick,** Med. Res. Inst.-Cardiovascular Dept. Michael Reese Hosp., 29th St. and Ellis Ave.
 Clifford George Pilz, West Side V. A. Hosp.

Victor E. Pollak, Dept. of Med., Univ. of Illinois Coll. of Med., 840 So. Wood St.
 George H. Pollock, 5759 Dorchester Ave.
 Sophie J. Presley, 4753 N. Broadway.
 John J. Procknow,** 950 E. 59th St.
 Theodore N. Pullman, Univ. of Chicago Clinics, 950 E. 59th St.
 Murray Rabinowitz, Univ. of Chicago, School of Med.
 Walter A. Rambach, Northwestern Univ. Med. School, 303 E. Chicago Ave.
 Theron G. Randolph,** 700 No. Michigan Ave.
 Howard F. Raskin, Billings Hosp., 950 E. 59th St.
 Blanchard B. Reeb, Passavant Memorial Hosp., 303 E. Superior St.
 Alexander P. Remenchik, 2828 W. 31st St.
 Stanley P. Rigler, 950 E. 59th St.
 Ira M. Rosenthal, Univ. of Illinois Coll. of Med., 840 So. Wood St.
 Robert J. Ryan,* Dept. of Med., Univ. of Illinois, 840 So. Wood St.
 Max S. Sadove,** Univ. of Illinois, 840 So. Wood St.
 George A. Saxton, Jr., 1853 W. Polk St.
 Arne E. Schairer, 30 No. Michigan Ave.
 Frank R. Schmid, Northwestern Univ. Med. School, 303 E. Chicago Ave.
 Harold M. Schoolman, 7617 D No. Eastlake Terrace.
 Steven O. Schwartz,** 55 E. Washington St.
 Theodore B. Schwartz, Presbyterian Hosp., 1753 W. Congress St.
 John S. Scheweppe,** Northwestern Univ. Med. School, Dept. of Biochemistry, 303 Chicago Ave.
 Aaron B. Shaffer, Heart Station, Michael Reese Hosp., 29th St. and Ellis Ave.
 James G. Shaffer,** 710 So. Wolcott Ave.
 Irving Siegel,** 5054 N. St. Louis Ave.
 Earl N. Silber, 111 No. Wabash Ave.
 Gordon Lloyd Snider, 7936 So. Luella.
 Arvin Somberg, V. A. West Side Hosp., 820 So. Damen Ave.
 Harold W. Spies, 3026 S. California St.
 Harold M. Spinka,** 6132 S. Kedzie Ave.
 Jeremiah Stamler, 1332 E. Madison Pk.
 Robert C. Stepto, 6636 Minerva Ave.
 Kurt Stern,** 2755 W. 15th St.
 Gene H. Stollerman, Dept. of Med. Northwestern Univ. Med. School, 303 E. Chicago Ave.
 Robert T. Stormont,** American Med. Association, 535 N. Dearborn St.
 Peter J. Talso, Mercy Hosp., 2537 S. Prairie Ave.
 E. Clinton Texier, Jr., Northwestern Univ. Med. School, 303 E. Chicago Ave.
 James E. P. Toman,** Chicago Med. School, 710 So. Wolcott.
 Otto H. Trippel, 1110 E. 62nd St.
 Frank E. Trobaugh, Jr., 1753 W. Congress St.
 Theodore R. Van Dellen,** 303 E. Chicago Ave.
 Sheldon S. Waldstein, 1835 W. Harrison St.
 William H. Wehrmacher, 670 N. Michigan Ave.
 Harry F. Weisberg,** 2713 W. 15th St.
 Walter S. Wiggins,** American Med. Association, 535 N. Dearborn St.
 Henry L. Wildberger, 1246 E. 85th St.
 Richard J. Winzler,** Dept. of Biochemistry, Univ. of Illinois Coll. of Med., 1853 W. Polk St.
 Janet Wolter,* Illinois Research Hosp., 1819 W. Polk St.
 Walter S. Wood, Dept. of Preventive Med., Univ. of Illinois Coll. of Med., 840 So. Wood St.

INDIANA

Fred S. Carter, 208 Forrest Dr., La Porte.
 J. L. Eisaman,** 427 W. Wiley, Bluffton.
 Charles E. Jackson, 303 S. Main St., Bluffton.
 Wei-Ping Loh, 1600 W. 6th Ave., Gary.
 Vincent L. Love, Davis Clinic, Marion.
 Louis A. Schneider,** 1351 W. Sherwood Terrace, Fort Wayne 6.
 Ralph O. Smith, 6th and Bussell, Vincennes.
 Michael J. Sweeney, 320 Inwood Dr., Evansville 11.
 William E. Symon, 303 South Main Street, Bluffton.
 Dan L. Urschel,** 108 E. Main, Mentone.

Indianapolis

Benedict E. Abreu,** Pitman-Moore Co., 1200 Madison Ave.

Orville T. Bailey, ** Larue D. Carter Memorial Hosp., 1315 W. 10th St.
 Roy H. Behnke, V.A. Hosp., 1481 W. 10th St.
 William H. Bond, ** Indiana Univ. Med. Center, 1040 W. Michigan St.
 James S. Browning, ** 3209 N. Meridian St.
 Carl A. Bunde, ** Pitman-Moore Co. Div. of Allied Labs., 1200 Madison Ave.
 Stanley M. Chernish, 1402 N. Linwood Ave.
 Warren E. Coggesshall, 3931 No. Campbell Ave.
 William P. Deiss, Jr., Dept. of Med., Indiana Univ. Med. Center, 1100 W. Michigan St.
 Alfred D. Dennison, Jr., ** 1005 Hume Mansur Bldg.
 Jordan Doran, 720 Hume Mansur Bldg.
 Robert B. Failey, Jr., ** Indiana Univ. Med. Center.
 Charles Fisch, 3121 N. Meridian.
 Paul J. Fouts, ** 522 Hume Mansur Bldg.
 Morris Green, Dept. of Pediatrics, Indiana Univ. Med. Center, 1100 W. Michigan St.
 Richard S. Griffith, Lilly Lab. for Clinical Res., Indianapolis Gen. Hosp.
 James B. Hammond, Indianapolis Gen. Hosp.
 Oscar M. Helmer, ** Lilly Lab. for Clinical Res., Indianapolis Gen. Hosp.
 John B. Hickam, ** Dept. of Med., Indiana Univ. Med. School, 1100 W. Michigan St.
 Don Carlos Hines, ** 740 So. Alabama St.
 Marion E. Hodes, Univ. of Indiana Dept. of Med., 1100 W. Michigan St.
 Glenn W. Irwin, Indiana Univ. Med. Center, 1040 W. Michigan St.
 Walter E. Judson, ** Indiana Univ. Med. Center, 1100 W. Michigan St.
 William R. Kirtley, ** Lilly Research Labs., 740 S. Alabama St.
 Kenneth G. Kohlstaedt, ** Gen. Hosp.-Lilly Lab.
 I. J. Kwitny, ** 5774 Broadway Terrace.
 B. L. Martz, Lilly Lab., Gen. Hosp.
 Robert J. Marvel, 3311 N. Meridian St.
 Franklin B. Peck, Sr., ** The Drake, Apt. 401, 3060 No. Meridian.
 Franklin B. Peck, Jr., Indianapolis Gen. Hosp.
 James D. Peirce, ** 3159 No. Pennsylvania St.

Raymond M. Rice, ** % Eli Lilly & Co., P.O. Box 618.
 Arthur B. Richter, ** 720 Hume Mansur Bldg.
 Anthony S. Ridolfo, 1708 Ellen Dr.
 Wayne L. Ritter, ** 404 Hume Mansur Bldg.
 Robert J. Rohn, Indiana Univ. Med. Center, 1100 W. Michigan St.
 Joseph Roshe, 681 E. Dr., Woodruff Pl.
 Wendell A. Shullenberger, ** 3740 Central Ave.
 Alfred T. Symmes, 625 E. Maple Rd.
 Morris E. Thomas, ** 715 Underwriters Bldg., 445 No. Pennsylvania St.
 S. O. Waife, Lilly Research Labs.
 Richard Wang, Indianapolis Gen. Hosp.
 Ralph C. Wilmore, ** 2601 Cold Springs Rd.
 Kenneth R. Woolling, 5303 Boulevard Pl.

IOWA

Robert E. Morrison, 508 LaFayette Bldg., Waterloo.
 George W. Winkelmann, ** V.A. Center, Des Moines.

Iowa City

George N. Bedell, Univ. Hosp.
 James T. Bradbury, ** Dept. Obstet. & Gynecol., Univ. Hosp.
 Elwood Buchman, 1325 Yowell St.
 Raymond G. Bunge, ** Dept. of Urology, Univ. Hosp.
 James A. Clifton, Univ. Hosp.
 William E. Connor, 2427 Crestview.
 James W. Culbertson, ** Dept. of Int. Med., Univ. Hosp.
 Richard D. Eckhardt, V.A. Hosp.
 John W. Eckstein, Dept. of Int. Med., Univ. Hosp.
 William K. Hamilton, 311 Willis Dr.
 Robert E. Hodges, Dept. of Int. Med., Univ. Hosp.
 Bartis M. Kent, Radioisotope Section, V.A. Hosp.
 Walter M. Kirkendall, ** Univ. Hosp.
 Russell Meyers, ** Dept. of Surgery, Univ. Hosp.
 George Perret, ** State Univ. of Iowa, Univ. Hosp.
 Richard E. Peterson, * Radioisotope Unit, V.A. Hosp.
 I. Maclean Smith, 1033 E. Washington St.
 Ernest O. Theilen, Dept. of Int. Med., Univ. Hosp.

Eugene W. Worton, 320 River St.

KANSAS

Martin J. FitzPatrick, Univ. of Kansas Med. Center, Kansas City 3.
 Arthur P. Klotz, ** Univ. of Kansas Med. Center, Kansas City 12.
 Robert T. Manning, Univ. of Kansas Med. Center, Rainbow Blvd. at 39th St., Kansas City 12.
 George L. Norris, ** 1819 E. 12th St., Winfield.
 Lawrence Peters, ** Dept. of Pharmacology, Univ. of Kansas Med. Center, Kansas City 12.
 Noreen B. Price, 5406-15th St., Topeka.
 Kurt R. Reissmann, ** Univ. of Kansas Med. Center, Kansas City 12.
 E. J. Ryan, ** Emporia Gazette Bldg., Emporia.
 Paul Richard Schloerb, Univ. of Kansas Med. Center, Kansas City 12.

KENTUCKY

William H. Anderson, Harlan Memorial Hosp., Harlan.
 Dean A. Emanuel, U. S. Army Med. Res. Lab., Fort Knox.
 Wallace E. Herrell, ** Lexington Clinic, 190 North Upper St., Lexington.
 Wilfred F. Jones, Jr., Harlan Memorial Hosp., Harlan.
 W. Vernon Lee, ** 200 Doctors Bldg., Covington.
 Paul D. Redleaf, Ireland Army Hosp., Fort Knox.
 Edward M. Schneider, Miners Memorial Hosp., McDowell.

Louisville

Marion F. Beard, ** 712 Francis Bldg.
 Maurice McDonald Best, Jr., Louisville Gen. Hosp.
 Charles H. Duncan, ** 323 E. Chestnut St.
 John Richard Gott, Jr., ** V.A. Hosp.
 John S. Harter, ** 1410 Castlewood Ave.
 Joseph P. Holt, ** Inst. for Med. Res., Univ. of Louisville, 101 W. Chestnut St.
 Leonard Leight, Inst. for Med. Res., 323 E. Chestnut St.
 Everett H. Sanneman, Jr., 3720 Edmond Lane.
 Arthur M. Schoen, ** Inst. for Med. Res., Univ. of Louisville, School of Med., 323 E. Chestnut St.
 Malcolm M. Stanley, ** 712 Circle Hill Rd.

Alex J. Steigman, ** 323 E. Chestnut St.
 Thomas D. Stevenson, Jr., Div. of Hematology, Univ. of Louisville Inst. for Med. Res., 323 E. Chestnut St.
 Carroll L. Witten, 2237 Taylorsville Rd.

LOUISIANA

Robert P. Bays, 1130 Louisiana Ave., Shreveport.
 Thomas C. Black, ** % V. A. Hosp., Alexandria.
 Douglas L. Gordon, 3974 Convention St., Baton Rouge 6.
 Joe E. Holoubek, ** 1513 Line Ave., Shreveport.
 Bernard M. Kalstone, ** 6815 Southern Ave., Shreveport.
 Neill Kendall Weaver, P.O. Box 551, Baton Rouge.

New Orleans

William R. Arrowsmith, ** Ochsner Clinic, 3503 Prytania St.
 Gerald Berenson, Dept. of Med., Louisiana State Univ. Med. School.
 Robert Birchall, ** Ochsner Clinic, Prytania and Aline Sts.
 George E. Burch, ** 1430 Tulane Ave.
 James A. Cronovich, ** 101 Colonial Club Dr.
 Harry E. Dascomb, ** Louisiana State Univ., 1542 Tulane Ave.
 William D. Davis, Jr., 2129 Palmer Ave.
 Vincent J. Derbes, ** Tulane Univ. School of Med.
 Joseph F. Dingman, Tulane Univ. School of Med., 1430 Tulane Ave.
 Marion W. Hood, ** Dept. of Pathology, Charity Hosp. of Louisiana.

Leo G. Horan, 1601 Perdido St.
 Albert L. Hyman, 1520 Louisiana Ave.
 Thomas N. James, 1006 State St.
 Homer D. Kirgis, ** #7 Colonial Club Dr.
 John D. Krafchuk, 1430 Tulane Ave.
 Louis Levy, II, 1636 Toledano St., Suite 301.
 William DeLoss Love, 1430 Tulane Ave.
 Robert J. McHardy, Browne-McHardy Clinic, 3636 Saint Charles Ave.
 William J. Mogabgab, Div. of Infectious Dis., Tulane Univ. School of Med., 1430 Tulane Ave.
 Charles B. Moore, 624 Lauricella Ave.
 Ralph V. Platou, ** 1430 Tulane Ave.

C. Thorpe Ray, ** Tulane Univ. Med. School.
 Irving L. Rosen, 301 Med. Arts Bldg.

John H. Seabury, ** Louisiana State Univ. School of Med., Dept. of Med.
 Albert Segaloff, ** Alton Ochsner Med. Foundation, Prytania St.
 Charles C. Sprague, ** Tulane Univ. School of Med., 1430 Tulane Ave.
 Sam A. Threefoot, 3500 Prytania St.
 Walter J. Trautman, Jr., 1441 Delachaise St.
 Walter G. Unglaub, Tulane Univ. School of Med., 1430 Tulane Ave.
 George E. Welch, Browne-McHardy Clinic, 3636 St. Charles Ave.

Benjamin B. Wells, ** Director, Professional Services, V.A. Hosp., 1601 Perdido St.
 Guy T. Williams, Browne-McHardy Clinic, 3636 Saint Charles Ave.
 C. Ray Womack, Dept. of Microbiology, Louisiana State Univ. School of Med.
 Philip C. Young, 4132 Saint Charles Ave.

MAINE

Charles A. Hannigan, 85 Goff St., Auburn.
 Robert L. Ohler, ** USVA Hosp., Togus.
 Paul Pfeiffer, 14 Gilman St., Waterville.
 Irving J. Poliner, 235 State St., Portland.
 Laura B. Weed, 51 Grove St., Bangor.

MARYLAND

William R. Beisel, 4014 Wexford Dr., Kensington.
 Frederic G. Burke, ** 3307 Woodbine St., Chevy Chase.
 Marcel E. Conrad, Jr., 1527 E. Falkland Lane, Silver Spring.
 John J. Curry, ** 10620 Georgia Ave., Silver Spring.
 Capt. Harry W. Daniell, 2500 Seminary Rd., Silver Spring.
 Leroy E. Duncan, Jr., 400 W. Montgomery Ave., Rockville.
 Gustave L. Gold, 4108 Dana Court, Kensington.
 Edward W. Hook, 305 Linden Ave., Towson 4.
 Robert E. Hyatt, 211 Forest Ave., Rockville.
 John R. Jaenike, 6305 Tilden Lane, Rockville.
 Richard H. Kosterlitz, 6421 Sargent Rd., Hyattsville.
 Arnold A. Lear, 6114 Westland Dr., Hyattsville.
 Leonard Melvin Lister, * Sunnybank, Stevenson.
 E. M. Nadel, 9003 Walden Rd., Silver Spring.
 John Peter Nason, 725 Dartmouth Ave., Silver Spring.
 Bernard H. Ostrow, 7961 Eastern Ave., Silver Spring.
 Hugo C. Pribor, Apt. 102, 1020 Quebec Terrace, Silver Spring.
 Van M. Sim, ** Chief, Clinical Research Div., Med. Directorate, C. W. Labs., Army Chemical Center.
 Samuel J. N. Sugar, ** 4300 Kaywood Dr., Mt. Rainier.
 Irene G. Tamagna, ** 7101 Connecticut Ave., Chevy Chase 15.

Baltimore

Reuben Andres, The Johns Hopkins Hosp.
 Ivan L. Bennett, Jr., Dept. of Med., The Johns Hopkins Hosp., 601 No. Broadway.
 Barnett Berman, 3119 Northbrook Rd.
 Gordon Cader, 714 Park Ave.
 Leighton E. Cluff, The Johns Hopkins Hosp.
 Robert E. Cooke, Dept. of Pediatrics, The Johns Hopkins Hosp.
 Frank W. Davis, Jr., 11 E. Chase St.
 Leon Eisenberg, 2610 Whitney Ave.
 George Entwistle, Univ. Hosp., Redwood and Green Sts.
 Laurence Finberg, 4940 Eastern Ave.
 Gustave Freeman, ** 314 Taplow Rd.
 Abraham Genecin, 714 Park Ave.
 David Grob, 4017 Elderon Ave.
 John Collins Harvey, The Johns Hopkins Hosp.
 Arthur L. Haskins, ** Univ. of Maryland, School of Med.
 Thomas R. Hendrix, The Johns Hopkins Hosp.
 J. O'Neal Humphries, The Johns Hopkins Hosp.
 Frank L. Iber, The Johns Hopkins Hosp.
 Dudley P. Jackson, The Johns Hopkins Hosp.
 Leon E. Kassel, 6839 Westridge Rd.
 Julius Richard Krevans, Johns Hopkins Hosp.
 Milton Landowne, ** Levindale.
 Louis Lasagna, 1903 So. Rd.
 Patricia A. McIntyre, The Johns Hopkins Hosp.
 Victor A. McKusick, 6309 Pinehurst Rd.

Alvin Margolius, Jr., The Johns Hopkins Hosp.

Albert I. Mendeloff, Sinai Hosp.

Claude J. Migeon, Harriet Lane Home 5, The Johns Hopkins Hosp.

John H. Miller, 8806 Wolverton Rd.

Stanley Miller, 914 N. Charles St.

William R. Milnor, The Johns Hopkins Hosp.

Harold M. Nitowsky, Sinai Hosp.

Philip S. Norman, The Johns Hopkins Hosp.

Robert T. Parker, Univ. Hosp.

Solbert Permutt, 4300 Garrison Blvd.

Robert G. Petersdorf, The Johns Hopkins Hosp.

Thaddeus E. Prout, The Johns Hopkins Hosp.

Richard S. Ross, 601 No. Broadway.

William R. Scarborough, The Johns Hopkins Hosp.

Sidney Scherlis,** 1214 N. Calvert St.

Albert Schilling, 3610 Marmon Ave.

Richard H. Shepard, 212 E. Gittings Ave.

Lawrence E. Shulman, Johns Hopkins Hosp.

Ernest W. Smith, 238 Brandon Rd.

Robert Stempfel, Jr., Dept. of Pediatrics (HLH), Johns Hopkins Hosp.

David A. Turner, Director, Biochemistry Res. Div., Dept. of Med., Sinai Hosp. Mt. Pleasant Inc., Greenspring and Belvedere Aves.

Thomas E. Van Metre, Jr., 1014 Saint Paul St.

Robert R. Wagner, Dept. of Med., Johns Hopkins Hosp.

W. Gordon Walker, 1928 McDowell St.

Mackenzie Walser, Dept. of Pharmacology, Johns Hopkins Univ. School of Med., 710 No. Washington St.

John G. Wiswell, Univ. Hosp., Redwood and Green Sts.

Joseph B. Workman, Univ. Hosp., Redwood and Green Sts.

Kenneth L. Zierler, The Johns Hopkins Hosp.

Bethesda

Frederic C. Bartter,** Clinical Center, National Inst. of Health.

James H. Baxter,** National Heart Inst., National Inst. of Health.

Delbert M. Bergenstal, Bldg. 10, Room 12N214, National Cancer Inst.

Nathaniel I. Berlin, National Cancer Inst.

Eugene Braunwald, National Heart Inst., National Inst. of Health.

Elmer B. Brown, Jr., 5937 Anniston Rd.

Ernest Cotlove, National Heart Inst.

James E. Darnell, Jr., National Microbiological Inst., National Inst. of Health.

James O. Davis,** Section on Experimental Cardiovascular Dis., National Heart Inst.

John L. Fahey, National Cancer Inst., National Inst. of Health.

James B. Field, 10407 Montrose Ave.

Emil J. Freireich, 9304 Holland Ave.

Donald L. Fry, National Heart Inst., National Inst. of Health.

Sam T. Gibson,** 5803 Anniston Rd.

Howard C. Goodman, National Heart Inst., National Inst. of Health.

Robert P. Grant,** National Heart Inst.

William M. Hart,** 8218 Wisconsin Ave.

Capt. J. H. L. Heintzelman MC USN, 7514 Old Chester Rd.

Roy Hertz,** National Cancer Inst.

Thomas J. Kennedy, Jr., Public Health Service, National Inst. of Health.

E. Richard King,** Director, Radioisotope Lab., U. S. Naval Hosp., National Naval Med. Center.

Maurice Landy,** Lab. of Chemical Pharmacology, National Cancer Inst.

Leonard Laster, Clinical Center, National Inst. of Health.

Lawrence S. Lilienfield, 6304 Maiden Lane.

Mortimer B. Lipsett, National Inst. of Health.

Leo Lutwak, National Inst. of Arthritis and Metabolic Dis., National Inst. of Health.

Andrew G. Morrow, National Heart Inst., National Inst. of Health.

Glenn E. Mortimore, National Inst. of Arthritis and Metabolic Dis., National Inst. of Health.

Jack Orloff, Lab. of Kidney and Electrolyte Metabolism, National Heart Inst.

Ralph E. Peterson, Inst. of Arthritis and Metabolic Dis., National Inst. of Health.

Floyd C. Rector, Jr.,* National Heart Inst.

Stanley J. Sarnoff,** Lab. of Cardiovascular Physiology, National Heart Inst.

J. Edwin Seegmiller, Inst. of Arthritis and Metabolic Dis., National Inst. of Health.

Stanton Segal, Clinical Center, National Inst. of Health.

Jane Shohl, 5811 Phoenix Dr.

N. Raphael Shulman, Clinical Center, National Inst. of Health.

Albert Sjoerdsma, National Heart Inst., National Inst. of Health.

Daniel Steinberg, National Heart Inst.

Frederick Stohman, Jr., Inst. of Arthritis and Metabolic Dis., National Inst. of Health.

Celia W. Tabor, 4 North Dr.

John P. Utz, National Inst. of Health, Lab. of Clin. Invest., National Microbiological Inst.

Henry N. Wagner, Jr., National Heart Inst., National Inst. of Health.

Donald M. Watkin, National Cancer Inst.

MASSACHUSETTS

Samuel Bachrach,** 44 West St., Worcester.

Norman Bank, 70 Glen Rd., Jamaica Plain 30.

George O. Bell,** 82 Arnold Rd., Wellesley Hills 82.

Frederick S. Bigelow,** 47 Norfolk Rd., Chestnut Hill 67.

James F. Blute, Jr., 465 Walnut St., Fall River.

Robert F. Bradley, 39 Northgate Rd., Wellesley.

Arthur E. Brown, 28 Livermore Rd., Wellesley Hills 81.

George F. Cahill, Jr., 8 Bay View Rd., Wellesley 82.

Thomas C. Chalmers, 33 Moon Hill Rd., Lexington 73.

Charles G. Colburn, 30 Denton Road West, Wellesley 81.

John F. Conlin,** 2 York Rd., Winchester.

John C. Corrigan,** 465 Walnut St., Fall River.

Jean Crabbe, 304 Adams St., Milton.

John F. Crigler, Jr., 15 Tappan Rd., Wellesley.

Robert K. Davis,** 38 Spring St., Williamstown.

William Mabon Davis, 46 Oxford Rd., Longmeadow.

Alfred M. Donovan, 15 Parker Rd., Wakefield.

Ellis Dresner, 170 Morton St., Jamaica Plain 30.

William Shibley Elias, 125 Amesbury St., Lawrence.

Allan J. Erslev, Oak Hill Rd., Harvard.
 Bruce C. Ferguson, 178 Walter St., Roslindale.
 Anne P. Forbes, ** 304 Adams St., Milton.
 Edward A. Gaensler, 229 Dudley Rd., Newton Centre 59.
 Charles J. Goodner, 203 Dudley Rd., Newton Centre.
 Michael A. Gravallese, Jr., 93 Main St., Andover.
 Mortimer S. Greenberg, 51 Brattle St., Cambridge 38.
 William E. R. Greer, 6 Hemlock Rd., Newton 64.
 Warren R. Guild, 59 Laconia St., Lexington.
 Philip W. Hall, III, 11 Laurel Hill Lane, Winchester.
 Meyer H. Halperin, ** 156 Broad St., Lynn.
 Richard M. Hays, 41 Country Club Lane, Belmont.
 Dorothy H. Henneman, 101 Parker Rd., Wellesley.
 J. Aaron Herschfus, 62 South Main St., Sharon.
 Norio Higano, The Memorial Hosp., 119 Belmont St., Worcester 5.
 Thomas F. Higgins, 140 Rock St., Fall River.
 F. Homburger, ** Bio-Research Inst. Inc., 9 Commercial Ave., Cambridge 41.
 James B. Hudson, 186 Glezen Lane, Wayland.
 Sidney H. Ingbar, 46 Kingswood Rd., Auburndale.
 James H. Jandl, Bow Rd., Wayland.
 Calvin M. Kunin, 6 Holland St., Newton 58.
 P. Herbert Leiderman, 61 Frost St., Cambridge.
 David Littmann, ** 83 Dean Rd., Belmont.
 Arthur S. Lurie, 150 Bradlee Ave., Swampscoot.
 William McFarland, 26 Pierrepont Rd., Winchester.
 John P. Mahoney, The Carney Hosp., 2100 Dorchester Ave., Dorchester 24.
 John J. Massarelli, Fallon Clinic, 10 Institute Rd., Worcester 9.
 John P. Merrill, ** 55 Loring Rd., Weston 93.
 Alan L. Michelson, 85 Nahant St., Lynn.
 John W. Norcross, ** 2 Monadnock Rd., Wellesley Hills 82.
 Arthur F. O'Keeffe, ** 648 Canton Ave., Milton.
 Sholem Postel, 306 Franklin St., Newton Corner 58.
 Lawrence Saxon, 1112 Centre St., Newton Centre.
 Robert S. Schwartz, 552 Adams St., Quincy.

Norman J. Silverstone, 32 Coolidge Hill Rd., Cambridge 38.
 Paul H. Seton, 34 Harrison Ave., Northampton.
 John F. Stapleton, 52 Harrington Dr., Holden.
 Lawrence I. Stellar, ** 33 Hamilton Rd., Newton 59.
 James M. Stormont, 107 Sherman Rd., Chestnut Hill 67.
 Maurice B. Strauss, ** 27 Grove Hill Ave., Newtonville.
 Thomas E. Twitchell, 77 Wellesley Ave., Wellesley 82.
 Henry S. M. Uhl, 89 Forest St., Worcester 9.
 Hans Waine, ** 51 Hampshire St., West Newton.
 William P. Walsh, 66 Clinton St., New Bedford.
 Paul F. Ware, ** 16 Norwich St., Worcester.
 Thomas A. Warthin, ** V.A. Hosp., West Roxbury 32.
 Gerald H. Whipple, Box 32, Payson Rd., Foxborough.
 Arnold H. Williams, 33 Washington Ave., Cambridge.
 George D. Zuidema, 36 Hawthorne Ave., Needham.
 Aniela S. Zygmuntowicz, ** 219 Commonwealth Ave., Chestnut Hill 67, Newton.

Boston

Walter H. Abelmann, Heart Station, Boston City Hosp.
 Mark Aisner, ** 285 Commonwealth Ave.
 Evangelos T. Angelakos, 80 E. Concord St.
 Frank K. Austen, Massachusetts Gen. Hosp., Fruit St.
 Donald V. Baker, Jr., ** V. A. Hosp.
 Mario G. Baldini, ** 2 Acorn St.
 Theodore B. Bayles, ** Robert Breck Brigham Hosp., 125 Parker Hill Ave.
 Patricia H. Benedict, ** Massachusetts Gen. Hosp., Fruit St.
 John A. Benson, Jr., Massachusetts Gen. Hosp.
 Edgar A. Bering, Jr., ** 300 Longwood Ave.
 Richard A. Bloomfield, ** 144 Commonwealth Ave.
 Elliott Bresnick, 68 Bay State Rd.
 Belton A. Burrows, Evans Memorial Hosp., 65 E. Newton St.
 John J. Byrne, ** 818 Harrison Ave.
 Edmund W. Campbell, The Lahey Foundation, 605 Commonwealth Ave.
 Leon Cander, Apt. A, 109 Peterborough St.
 Carl E. Cassidy, New England Center Hosp., 171 Harrison Ave.

William B. Castle, ** Thorndike Memorial Lab., Boston City Hosp.
 Sanford Chodosh, Boston City Hosp., 818 Harrison Ave.
 Jay D. Coffman, 86 E. Newton St.
 Alan S. Cohen, Arthritis Unit, Massachusetts Gen. Hosp.
 John P. Connelly, Massachusetts Gen. Hosp.
 Perry J. Culver, ** Massachusetts Gen. Hosp., Fruit St.
 Donat Paul Cyr, ** 605 Commonwealth Ave.
 William Dameshek, ** New England Center Hosp., 171 Harrison Ave.
 Charles S. Davidson, ** Boston City Hosp.
 Jean P. Dawson, The Boston City Hosp., 818 Harrison Ave.
 Albert I. C. DeFriez, 264 Beacon St.
 Robert E. DeLashmutt, U. S. Public Health Service Hosp., 77 Warren St.
 Harry A. Derow, ** 520 Beacon St.
 Jane F. Desforges, Boston City Hosp.
 Lewis Dexter, ** 721 Huntington Ave.
 Alexander A. Doerner, ** U. S. Public Health Service Hosp., 77 Warren St.
 James T. Dowling, Thorndike Memorial Lab., Boston City Hosp., 818 Harrison Ave.
 Charles P. Emerson, Jr., ** Evans Memorial, 65 E. Newton St.
 Kendall Emerson, Jr., ** Peter Bent Brigham Hosp.
 Robert J. Fahey, 314 Commonwealth Ave.
 John J. Finn, Jr., ** 5 Bay State Rd.
 William H. Fishman, ** Tufts Coll. Med. School, Dept. of Surgery.
 Joseph M. Foley, ** Neurological Unit, 818 Harrison Ave.
 N. Robert Frank, Dept. of Physiology, Harvard School of Public Health, 55 Shattuck St.
 Norbert Freinkel, Thorndike Lab., Boston City Hosp.
 Dale G. Friend, ** Peter Bent Brigham Hosp., 721 Huntington Ave.
 Frank H. Gardner, Peter Bent Brigham Hosp.
 Count D. Gibson, Jr., 25 Bennett St.
 Leon I. Goldberg, Dept. of Med., Massachusetts Gen. Hosp.
 Walter T. Goodale, 300 Longwood Ave.
 Richard Gorlin, 721 Huntington Ave.
 Seymour J. Gray, ** 721 Huntington Ave.

Milton W. Hamolsky, Beth Israel Hosp., 330 Brookline Ave.
 Joseph M. Hayman, Jr.,** 136 Harrison Ave.
 Howard H. Hiatt, Beth Israel Hosp., 330 Brookline Ave.
 William Hollander, Massachusetts Memorial Hosp., 750 Harrison Ave.
 William E. Huckabee, Massachusetts Memorial Hosp., 750 Harrison Ave.
 Kurt J. Isselbacher, Massachusetts Gen. Hosp.
 Charles A. Janeaway,** Children's Hosp., 300 Longwood Ave.
 Melvin H. Kaplan, House of the Good Samaritan, 25 Binney St.
 Edward H. Kass, Thorndike Memorial Lab., Boston City Hosp.
 John H. Knowles, Massachusetts Gen. Hosp., Fruit St.
 George S. Kurland, 330 Brookline Ave.
 Ezra Lamdin, V.A. Hosp., 150 So. Huntington Ave.
 Sean M. Lavelle, Tuft's Hematology Service, Boston City Hosp., 818 Harrison Ave.
 Samuel E. Leard,** Med. Associates, 203 Commonwealth Ave.
 Henry M. Lemon,** 80 East Concord St.
 Julius Litter,** Med. Assocs. of Mass. Memorial Hosp., 203 Commonwealth Ave.
 Richard A. MacDonald, Mallory Institute of Pathology, Boston City Hosp.
 John A. McGowan, 270 Commonwealth Ave.
 William F. McNeely, 226 Marlborough St.
 Farah Maloof, Massachusetts Gen. Hosp., Fruit St.
 Richard A. Marshall, Thorndike Memorial Lab., Boston City Hosp., 818 Harrison Ave.
 Christopher M. Martin, Thorndike Memorial Lab., Boston City Hosp.
 Benedict F. Massell,** 25 Binney St.
 Richard H. Meade, III, 264 Brookline Ave.
 Irma B. Mednicoff, Blood Research Lab., New England Center Hosp., Harrison Ave. and Bennet St.
 James Metcalfe, 221 Longwood Ave.
 Robert A. Milch, Dept. of Surgery, Peter Bent Brigham Hospital, 721 Huntington Ave.
 Joseph M. Miller, 416 Marlborough St.
 William C. Moloney,** 39 Bay State Rd.
 David G. Nathan, Peter Bent Brigham Hosp., 721 Hunting-
 ton Ave.
 George Nichols, Jr., 25 Shattuck St.
 Nancy Nichols, Harvard Med. School, 25 Shattuck St.
 Joseph J. O'Connor, 314 Commonwealth Ave.
 Solomon Papper, Boston Veterans Hosp., 150 S. Huntington Ave.
 A. Seymour Parker, Jr.,** 605 Commonwealth Ave.
 David C. Poskanzer, 145 Pinckney St.
 Samuel Proger,** New England Center Hosp., 171 Harrison Ave.
 John T. Quinby,** 275 Charles St.
 Allan G. Ramsay, New England Center Hosp., 171 Harrison Ave.
 Arnold S. Relman, Evans Memorial Hosp., 65 E. Newton St.
 Donald W. Rennie,* Dept. of Physiology, Harvard Med. School, 25 Shattuck St.
 John B. Richards, Boston City Hosp., 818 Harrison Ave.
 Stanley L. Robbins,** Mallory Inst. of Pathology, Boston City Hosp.
 Eugene D. Robin, 721 Huntington Ave.
 Joseph Rogers,** Joseph H. Pratt Diagnostic Hosp.
 David L. Rutledge,** 605 Commonwealth Ave.
 David D. Rutstein,** Dept. of Preventive Med., Harvard Med. School, 25 Shattuck St.
 Robert C. Schlant, Peter Bent Brigham Hosp., 721 Huntington Ave.
 Robert Schwartz, Metabolism Research Lab., Children's Med. Center, 300 Longwood Ave.
 William B. Schwartz, New England Center Hosp., 171 Harrison Ave.
 Maurice S. Segal,** 370 Commonwealth Ave.
 Herbert A. Selenkow, Peter Bent Brigham Hosp.
 Bertram Selverstone,** New England Center Hosp., 171 Harrison Ave.
 Louis A. Selverstone, New England Center Hosp.
 Herbert Stanwood Sise,** 203 Commonwealth Ave.
 John H. Sisson, 203 Commonwealth Ave.
 Lloyd H. Smith, Jr., Massachusetts Gen. Hosp., Fruit St.
 Carlton R. Souders,** Lahey Clinic, 605 Commonwealth Ave.
 Joseph R. Stanton, 482 Beacon St.
 Richard H. Stanton,** 482 Bea-
 con St.
 Mario Stefanini,** Saint Elizabeth's Hosp.
 David M. Travis, Peter Bent Brigham Hosp., 721 Huntington Ave.
 Philip Troen, 330 Brookline Ave.
 Elton Watkins, Jr., Children's Med. Center, 300 Longwood Ave.
 Louis Weinstein,** New England Center Hosp., 171 Harrison Ave.
 Thomas H. Weller,** Harvard School of Public Health, 25 Shattuck St.
 Stanford Wessler,** 330 Brookline Ave.
 Edwin O. Wheeler,** Massachusetts Gen. Hosp.
 James L. Whittenberger,** 55 Shattuck St.
 Robert W. Wilkins,** Evans Memorial, 65 E. Newton St.
 James E. Wood, Evans Memorial Hosp., 65 E. Newton St.
 Norman Zamcheck, Mallory Inst. of Pathology, Boston City Hosp.
 Louis Zetzel,** 17 Bay State Rd.
 Paul Zoll,** 330 Brookline Ave.
 Brookline
 Te Wen Chang, 272 Allston St.
 Robert W. Kistner, 32 Cumberland Ave.
 Eugene G. Laforet, 281 St. Paul St.
 Guy Lemieux, 113 Gerry Rd., Hancock Village.
 Harold D. Levine,** 1180 Beacon St.
 Joseph P. Lynch,** 1180 Beacon St.
 Sergio I. Magalini, Tumor Treatment Clinic, Children's Hosp.
 Jack Mendelson, 28A Littell Rd.
 Aaron Miller, 71 Parkman St.
 Herbert P. Minkel, 1101 Beacon St.
 MICHIGAN
 Arnold R. Axelrod, 24230 Seneca, Oak Park 37.
 Gerald M. Breneman, 16926 13 Mile Rd., Birmingham.
 M. J. Brennan, 1176 Grayton Rd., Grosse Pointe 30.
 Earl L. Burbidge,** The Upjohn Co., Kalamazoo 99.
 William J. Butler, Peoples State Bank, St. Joseph.
 Douglas Chandler, 14441 Vernon, Oak Park.
 George O. Clifford, 777 Fisher Rd., Grosse Pointe 30.
 A. A. Darmstaetter, Jr., 227 Briggs Bldg., Birmingham.
 Robert C. Douglass, 24660 Cleverlawn, Oak Park.
 Thomas D. Grekin, 603 W. 11 Mile Rd., Royal Oak.

Harold F. Hailman, ** 301 Henrietta St., Kalamazoo.

John E. Harroun, 306 Matthews Bldg., Owosso.

Robert W. Heinle, ** Div. of Biological Res., The Upjohn Co., Kalamazoo.

Glenn I. Hiller, ** 104 Cambridge, Pleasant Ridge.

Samuel D. Jacobson, ** Med. Director, Wayne County Gen. Hosp., Eloise.

W. John Kenfield, 756 Pipestone, Benton Harbor.

R. Ralph Margulis, 561 Merritt Lane, Birmingham.

Yoshikazu Morita, 131 Wendellton Rd., Birmingham.

Norman A. Nelson, Wayne County Gen. Hosp., Eloise.

Cornelius J. O'Donovan, 301 Henrietta St., Kalamazoo.

William J. O'Hare, Jr., * Med. Section, Ford Motor Co., 3000 Schaefer Rd., Dearborn.

Harold L. Oster, 1218 Greenwood Ave., Jackson.

Edward M. Priest, 945 Poppleton, Birmingham.

Charles L. Schneider, ** 314 Calvin Theatre Bldg., 22148 Michigan Ave., Dearborn.

John W. Sigler, 1356 Greenlawn Blvd., Birmingham.

Richmond W. Smith, ** 77 Meadow Lane, Grosse Pointe 36.

Thomas H. Snider, 204 W. Elm Ave., Monroe.

Robert W. Talley, 301 Henrietta St., Kalamazoo.

Frederick N. Talmers, U. S. Veterans Hosp., Southfield and Outer Dr., Dearborn.

Harold A. Tucker, ** P. O. Box 831, Kalamazoo.

E. Gifford Upjohn, ** The Upjohn Co., Kalamazoo.

Joseph P. Webb, ** The Upjohn Co., Kalamazoo 99.

Robert M. Whitrock, ** 295 Ridgemont Rd., Grosse Pointe 36.

William Q. Wolfson, 130 Waverley St., Highland Park 3.

Irving I. Young, 32280 Shrewsbury, Farmington.

Ann Arbor

Paul S. Barker, ** Dept. of Int. Med., Univ. of Michigan Hosp.

Jere M. Bauer, ** Dept. of Int. Med., Univ. Hosp.

William H. Beierwaltes, ** Dept. of Int. Med., Univ. Hosp.

Robert E. L. Berry, ** Univ. Hosp.

Frank H. Bethell, ** 409 Lenawee Dr.

Ronald C. Bishop, Dept. of Int. Med., Univ. Hosp.

Irving M. Blatt, Dept. of Otolaryngology, Univ. of Michigan.

gan Med. School.

Giles G. Bole, Jr., 830 Brace.

Robert J. Bolt, 1223 Pomona Rd.

Darrell A. Campbell, ** St. Joseph's Mercy Hosp.

Edward A. Carr, Jr., 1263 Crosby Crescent.

C. William Castor, 2505 Pittsfield Blvd.

Charles W. Denko, ** Rackham Arthritis Res. Unit, Univ. of Michigan Hosp.

Ivan F. Duff, ** Univ. Hosp.

Frederick H. Epstein, ** Dept. of Epidemiology, U. of Michigan School of Public Health.

Stefan S. Fajans, 2485 Devonshire Rd.

Arthur B. French, 1113 W. Liberty St.

Alexander Gotz, ** 200 No. Ingalls.

Keith Stuart Henley, Dept. of Int. Med., Univ. Hosp.

Paul E. Hodgson, Dept. of Surgery, Univ. Hosp.

Sibley W. Hoobler, ** 2228 Belmont Rd.

Makoto Ishikawa, 820 E. Kingsley.

Theodore G. Kabza, 2310 Fernwood.

Donald R. Korst, V.A. Hosp.

James A. McLean, Univ. Hosp.

Kenneth P. Mathews, Dept. of Int. Med., Univ. Hosp.

Muriel C. Meyers, 818 Lincoln.

William M. Mikkelsen, Univ. Hosp.

John A. Moorhouse, Metabolic Res. Unit, Univ. Hosp.

James V. Neel, ** Heredity Clinic, Univ. of Michigan.

H. Marvin Pollard, ** Dept. of Int. Med., Univ. Hosp.

William Dodd Robinson, ** Dept. of Med., Univ. Hosp.

Henry K. Schoch, V.A. Hosp., 2215 Fuller Rd.

Norma R. Spafford, 1348 Wilmot Ave.

L. O. Standaert, Dept. of Int. Med., Univ. Hosp.

David H. P. Streeten, Univ. of Michigan Hosp.

Alexander M. Waldron, ** 309 No. Ingalls.

John M. Weller, 1621 So. Blvd.

Park W. Willis, III, Univ. of Michigan Hosp.

Detroit

Joseph P. Abraham, Henry Ford Hosp.

Joseph A. Arena, Jr., 22928 Woodward Ave.

Thomas M. Batchelor, 18060 Conant.

J. Edward Berk, ** Sinai Hosp. of Detroit, 6767 W. Outer Dr.

Alexander Blain, III, Alexander Blain Hosp., 2201 E. Jefferson Ave.

Alfred J. Bollet, Wayne State Univ. Coll. of Med., 1401 Rivard St.

Kenneth N. Campbell, ** 22928 Woodward Ave.

Harry E. Carnes, ** Parke, Davis and Co.

Charles N. Clarke, * 2501 W. Grand Blvd.

James M. Colville, Div. of Infectious Dis., Henry Ford Hosp., W. Grand Blvd. at Hamilton.

Frank Cox, Jr., Div. of Infectious Dis., Henry Ford Hosp., 2799 W. Grand Blvd.

Valentino DeFazio, 1401 Rivard St.

L. Donald Fagin, ** 18254 Livernois Ave.

George S. Fisher, ** 1709 David Whitney Bldg.

Boy Frame, 18694 Warrington Dr.

Sidney Friedlaender, ** 10300 W. 7 Mile Rd.

Seymour Gordon, 19444 Greenfield.

Ferdinand E. Greifenstein, ** Dept. of Anesthesiology, Wayne State Univ. Coll. of Med., 1401 Rivard St.

Harper Keith Hellem, Wayne Univ. Coll. of Med., 1401 Rivard St.

A. B. Henderson, ** 9041 Dexter Blvd.

Henry D. Kaine, 19506 Shrewsbury.

Howard A. Klein, 1846 David Whitney Bldg.

Conrad R. Lam, ** The Henry Ford Hosp.

Andrew G. Lasichak, ** 908 Kales Bldg.

Robert B. Leach, Wayne Univ. Coll. of Med., 1401 Rivard St.

Stanley H. Levy, 7441 W. 7 Mile Rd.

Benjamin M. Lewis, Dept. of Med. Wayne Univ. Coll. of Med., 1401 Rivard St.

Gerald A. LoGrippo, ** Henry Ford Hosp., 2799 W. Grand Blvd.

Robert L. McClaughry, 16526 Princeton.

William O. Maddock, Dept. of Med. Wayne State Univ. Coll. of Med., 1401 Rivard St.

Ivan J. Mader, Wayne Univ. Coll. of Med., 1401 Rivard St.

Paul E. Mattman, ** 1500 Seminole Ave.

Raymond C. Mellinger, Henry Ford Hosp.

Frank A. Montmorency, Dept. of Urology, Wayne State Univ. Coll. of Med., 1401 Rivard St.

Raymond W. Monto, ** Henry Ford Hosp.

Robert Mosher, Providence Hosp., 2500 W. Grand Blvd.
 Gordon B. Myers, ** Wayne Univ. Coll. of Med.
 Robert K. Nixon, Henry Ford Hosp., 2799 W. Grand Blvd.
 Jan Nyboer, ** Harper Hosp., 3825 Brush St.
 C. Alvin Paulsen, Dept. of Med., Wayne State Univ. Coll. of Med., 1401 Rivard St.
 Edward L. Quinn, Henry Ford Hosp., 2799 W. Grand Blvd.
 Timothy J. Regan, Wayne State Univ. Coll. of Med., 1401 Rivard St.
 Joseph A. Rinaldo, Jr., 4261 Glendale.
 David J. Sandweiss, ** 9739 Dexter Blvd.
 D. Emerick Szilagyi, ** 2799 W. Grand Blvd.
 Fred W. Whitehouse, Henry Ford Hosp., 2799 W. Grand Blvd.
 G. M. Wilson, Jr., Henry Ford Hosp., 2799 W. Grand Blvd.

MINNESOTA

Carl S. Alexander, 229-D Fort Snelling, Saint Paul 11.
 Cyrus C. Brown, Jr., 211 No. 24th Ave. East, Duluth 12.
 Alfred Eichenholz, Bldg. 63-D, Fort Snelling, Saint Paul 11.
 William F. Mazzitello, 1185 So. Cleveland, Saint Paul 16.
 John B. Moyer, Duluth Clinic, Duluth.
 Ben Sommers, ** 1232 Lowry Med. Arts Bldg., St. Paul 2.
 Philip H. Soucheray, ** 350 Saint Peter St., Saint Paul 2.
 R. L. Varco, ** 420 N. Mississippi River Blvd., St. Paul 4.

Minneapolis

Donald S. Amatuzio, 5401 10th Ave. So.
 Wilbur M. Benson, ** 133 Millard Hall, Univ. of Minnesota Med. School.
 James B. Carey, Jr., Univ. Hosp. Ephraim B. Cohen, ** 1047 Med. Arts Bldg.
 Richard P. Doe, 6001 1st Ave. So.
 Alfred Doscherholmen, ** 4021—23rd Ave. So.
 Edmund B. Flink, ** 5665 Woodlawn Blvd.
 Frederick C. Goetz, 2430 Clinton Ave. So.
 George B. Gordon, V.A. Hosp.
 Paul S. Hagen, ** V. A. Hosp., 54th St. and 48th Ave., So.
 Wayne L. Hooth, 508 Southdale Med. Bldg., 66th and France Ave.
 Robert B. Howard, 1342 Mayo Memorial Bldg., Univ. of Minnesota.

Wyman E. Jacobson, ** 3015 Sumter Ave.
 Byrl James Kennedy, Univ. Hosp.
 Elliot Latts, 2655 Irving Ave. So.
 Paul T. Lowry, Med. Arts Bldg.
 Frank M. MacDonald, V.A. Hosp., 54th St. and 48th Ave. So.
 Frank E. Martin, 518 Marquette Bank Bldg.
 William A. O'Brien, 3 Circle East.
 Ananda S. Prasad, Univ. Hosp.
 Alvin L. Schultz, 5137 Irving Ave. So.
 Samuel Schwartz, ** 1616 James Ave.
 Ralph Eugene Smith, Dept. of Med., U.S.V.A. Hosp.
 Louis Tobian, Jr., Dept. of Int. Med., Univ. of Minn. School of Med.
 Lewis W. Wannamaker, Dept. of Pediatrics, Univ. of Minnesota.
 W. Lane Williams, ** Dept. of Anatomy, Univ. of Minnesota Med. School.
 Paul Winchell, Univ. Hosp.
 Leslie Zieve, ** V.A. Hosp., Bldg. 13 N.
 Horace H. Zinneman, ** Bldg. 12 N, V.A. Hosp.

Rochester

Richard W. P. Achor, 200 1st Street, S. W.
 E. D. Bayrd, 1116-10th St., S. W.
 Kenneth G. Berge, 200 1st St., S. W.
 Charles M. Blackburn, Mayo Clinic.
 James C. Broadbent, 200 1st St., S. W.
 Howard B. Burchell, ** Mayo Clinic.
 James Cain, ** Dept. of Med., Mayo Clinic.
 Charles F. Code, ** Mayo Foundation.
 Talbert Cooper, ** Mayo Clinic.
 William H. Dearing, ** Mayo Clinic.
 John F. Fairbairn II, Mayo Clinic.
 Ward S. Fowler, ** Mayo Clinic.
 Clifford F. Gastineau, Mayo Clinic.
 Joseph E. Geraci, ** Mayo Clinic.
 Ray W. Gifford, 1435 Durand Ct.
 H. F. Helmholz, Jr., ** Mayo Clinic.
 Edgar A. Hines, Jr., ** Mayo Clinic.
 David L. Hoffman, 200 1st St., S. W.
 John L. Juergens, 200 1st St., S. W.
 William M. McConahey, ** 1122 6th St., S. W.
 Harold T. Mankin, Mayo Clinic.

R. Drew Miller, Mayo Clinic.
 Howard M. Odel, ** Mayo Clinic.
 Jaime Paris, Mayo Clinic.
 Thomas W. Parkin, 102-110 2nd Ave., S. W.
 Gustavus A. Peters, ** Mayo Clinic, 200 1st St., S. W.
 Raymond V. Randall, Mayo Clinic.
 Richard J. Reitemeier, Mayo Clinic, 200 1st St., S. W.
 Robert M. Salassa, ** Mayo Clinic, 200 1st St., S. W.
 Donald A. Scholz, 913-14th Ave., N. E.
 Harold H. Scudamore, ** Mayo Clinic, 200 1st St., S. W.

MISSISSIPPI

John T. Lane, ** 2228 Wilkes Ave., Biloxi.
 W. K. Purks, ** Vicksburg Clinic, Vicksburg.

Jackson

Fred Allison, Jr., Univ. Hosp.
 Orlando J. Andy, Dept. of Neurosurgery, The Univ. of Mississippi Med. Center.
 Curtis P. Artz, ** Univ. of Mississippi Med. Center.
 Warren N. Bell, 1517 Myrtle St.
 Thomas M. Blake, Univ. Hosp.
 Norman Burnstein, 514 C E. Woodrow Wilson Blvd.
 Arthur C. Guyton, Dept. of Physiology and Biophysics, Univ. Med. Center.
 James D. Hardy, Dept. of Surgery, Univ. of Mississippi Med. Center.
 James G. Hilton, Dept. of Pharmacology, Univ. of Mississippi Med. Center.
 Herbert G. Langford, Univ. Med. Center.
 Tom D. Norman, Dept. of Pathology, Univ. Med. Center.
 Josef R. Smith, Cardiopulmonary Station, Univ. of Mississippi Med. Center.
 Watts R. Webb, Univ. of Mississippi Med. Center.

MISSOURI

William H. Ames, 2318 Lovers Lane, Saint Joseph.
 Charles E. Andrews, V.A. Hosp., 4801 Linwood Blvd., Kansas City 3.
 Jack Barrow, 110 So. Central, Clayton 5.
 John W. Berry, 8034 Crescent, Clayton 5.
 Thomas W. Burns, Dept. of Med., Univ. of Missouri, Columbia.
 Francis J. Catanzaro, 1209 Lockett Lane, Kirkwood 22.
 Murray Chinsky, 7200 Colgate, University City 5.
 Morton C. Creditor, Director, Med. Ed. and Res., Menorah

Med. Center, 4949 Rockhill Rd., Kansas City 10.
 Arnold Dankner, 110 So. Central Ave., Clayton 5.
 Howard R. Engel, Apt. #1-C, 8330 Delcrest Dr., University City.
 Thomas B. Ferguson, 8528 Colonial Lane, Ladue 24.
 Sidney Jick, 7551 Wellington Way, Clayton 5.
 Harold J. Joseph, 227 Tanglewood Dr., Ladue 24.
 John H. Killough, 9 Hickory Hill Dr., Columbia.
 Robert D. Lange, 954 Whitecliff, Kirkwood 22.
 Marvin E. Levin, 7818 Stanford, University City.
 Jack M. Martt,* Univ. Hosp., Columbia.
 William D. Perry, 110 So. Central Ave., Clayton 5.
 Harry J. Price,** 312 E. Main St., Hayti.
 Eric Reiss, 837 McKnight Rd., University City 24.
 William E. Ruth, 623 W. 62nd St., Kansas City 13.
 H. Eugene Smith,* 403 E. 47th St., Kansas City.
 Ruth C. Steinkamp, 110 So. Central, Clayton.
 John C. Tinsley, Jr.,** 16 So. 10th St., Columbia.
 Alvin S. Wenneker, 858 Long-acre, University City 24.

Saint Louis

Bernard A. Bercu, Barnes Hosp.
 Grace E. Bergner,** 114 No. Taylor Ave.
 Richard J. Bing,** V.A. Hosp., 915 No. Grand Blvd.
 Neal S. Bricker, Washington Univ. School of Med.
 Hugh Chaplin, Jr., 10 Beverly Pl.
 William H. Daughaday, Barnes Hosp.
 John D. Davidson, 600 Union Blvd.
 Albert B. Eisenstein, Director, Div. of Med., Jewish Hosp. of Saint Louis, 216 So. Kingshighway Blvd.
 Anthony P. Fletcher, 5414 Delmar Blvd.
 David Goldring,** 500 S. Kingshighway.
 Samuel B. Guze, Barnes Hosp.
 William J. Harrington, Washington Univ. School of Med., 600 S. Kingshighway.
 David M. Kipnis, Dept. of Med., Washington Univ. School of Med.
 William G. Klingberg,** Saint Louis Children's Hosp., 500 So. Kingshighway Blvd.

William A. Knight, Jr.,** 4161 Lindell Blvd.
 Virgil Loeb, Jr., 100 No. Euclid Ave.
 Robert E. Mack, V.A. Hosp., 915 No. Grand Blvd.
 Edward Massie,** 457 N. Kingshighway.
 Virginia Minnich,** Dept. of Int. Med., Barnes Hosp., 600 So. Kingshighway Blvd.
 Daniel N. Mohler, Jr., Dept. of Int. Med., Barnes and Wohl Hosp.
 J. Gerard Mudd, 1325 S. Grand.
 Robert Paine, Suite 502, Beaumont Med. Bldg., 3720 Washington St.
 Morton D. Pareira,** 216 S. Kingshighway.
 Seymour Reichlin, 4227 Flad Ave.
 Eli Robins, 4580 Scott.
 Marvin Rosecan, 9709 Fairgreen Dr.
 Sol Sherry,** 216 S. Kingshighway.
 Don L. Thurston,** St. Louis Children's Hosp., 500 S. Kingshighway.
 Joseph B. Vacca, 2832 Nebraska Ave.
 Edward B. Williams, Jr., 4242 Easton Ave.
 Keith S. Wilson,** 4952 Maryland Ave.
 Jack Zuckner, 4500 Olive St.

MONTANA

A. K. Atkinson,** Box 911, Great Falls.
 John S. Gilson, 17 Prospect Heights, Great Falls.
 Laurence L. Howard,** 410 Central Ave., Great Falls.
 John A. Layne,** Great Falls Clinic, Great Falls.
 R. E. Lemire, Jr., 304 The Doctor's Bldg., Billings.
 Donald C. Overy, Great Falls Clinic, Great Falls.

NEBRASKA

Kenneth F. Kimball, Route 3, Box 305, Kearney.
 Major Strother B. Marshall, U.S.A.F. (MC), 3902nd U.S.A.F. Hosp., Offutt Air Force Base.

Omaha

John L. Barmore, Univ. Hosp., 42nd and Dewey Ave.
 John L. Beattie, 4129 Ohio St.
 F. Lowell Dunn,** 640 The Doctors' Bldg., 44th and Farnam.
 Robert L. Grissom,** The Univ.

of Nebraska Coll. of Med., 42nd St. and Dewey Ave.
 Robert P. Heaney,* Creighton Univ. School of Med., 302 No. 14th St.
 Mary J. Henn, Univ. of Nebraska Coll. of Med.
 B. J. Koszewski, 514 So. 41st St.
 Henry J. Lehnhoff, Jr.,** 720 Doctors Bldg., Farnam at 44th St.
 George W. Loomis, 5616 Emile St.
 Harry W. McFadden, Jr., Univ. of Nebraska Hosp.
 Haskell Morris, 530 Med. Arts Bldg.
 Merle M. Musselman,** Dept. of Surgery, Univ. of Nebraska Coll. of Med.
 Rosalie B. Nellig, Woodmen Circle Bldg., 3303 Farnam.
 Peyton T. Pratt, Univ. Hosp., 42nd and Dewey Ave.
 Douglas W. Terry, Creighton Univ. School of Med., 302 No. 14th St.
 John R. Walsh, Director, Dept. of Med., Creighton Univ. School of Med., 302 No. 14th St.
 Frederick Ware, Jr., 530 So. 53rd St.
 Charles M. Wilhelmj,** Creighton Univ.

NEW HAMPSHIRE

William M. Chambers,** Hitchcock Clinic, Hanover.
 Franklin G. Ebaugh, Jr., Hitchcock Clinic, Hanover.
 James T. Heyl,** Med. Director, Phillips Exeter Academy, Exeter.
 F. Corbin Moister,** Hitchcock Clinic, Hanover.
 Robert J. Vanderlinde, 10 Rope Ferry Rd., Hanover.

NEW JERSEY

Sol Abramowitz, 239 Leslie St., Newark 12.
 William B. Abrams, 416 No. Ridgewood Rd., South Orange.
 Arthur Bernstein,** 688 Clinton Ave., Newark 8.
 Paul K. Boyer,** 129 Summit Ave., Summit.
 Bernard H. Chaiken, 58 Chatham Rd., Short Hills.
 Burton M. Cohen, Med. Arts Bldg., 230 W. Jersey St., Elizabeth.
 Miles E. Drake,** 735 Pear St., Vineland.
 Gerard L. Eastman, 200 Closter Dock Rd., Closter.
 Rose R. Ellison, 95 Westminster Ave., Bergenfield.

J. Brewster Gere, 369 So. Ridgewood Rd., South Orange.
 Milton Gross, Director, Dept. of Biochemistry, Margaret Hague Maternity Hosp., 88 Clifton Pl., Jersey City 4.
 Alfred R. Henderson, 321 Sunset Ave., Asbury Park.
 Philip H. Henneman, Seton Hall Med. School, Jersey City 4.
 Irving Innerfield,** 20 Knickerbocker Rd., Tenafly.
 Ernest R. Jaffe, Apt. A, 124 Moore Ave., Leonia.
 Harold Jeghers,** Seton Hall Coll. of Med., Jersey City Med. Center, Jersey City 4.
 Norman W. Karr,** Squibb Inst. for Med. Res., New Brunswick.
 Edward Kessler, 17 Woodland Ave., Morristown.
 Howard A. Levy, 306 Whitehorse Pike, Collingswood.
 Maxwell L. Littman,** 16 Valley Pl., Tenafly.
 Mark H. Lund, Squibb Inst. for Med. Res., Georges Rd., New Brunswick.
 Stephen I. Morse, 3030 Edwin Ave., Fort Lee.
 Edward R. Neary,** 210 Carlton Terrace, Teaneck.
 Elliott F. Osberman, 150 Columbus Ave., Closter.
 Victor Parsonnet, 202 Clinton Ave., Newark 5.
 Edward A. Partenope, 363 Middlesex Ave., Colonia.
 Edmund D. Pellegrino, Hunterdon Med. Center, Flemington.
 James H. Pert, 146 Knickerbocker Rd., Closter.
 Frank A. Porfido, 27 Baker Ave., Dover.
 Edward C. Reifenstein, Jr.,** 50 Hoot Owl Terr., Smoke Rise, Butler.
 Capt. Albert D. Roberts, Jr.,* 20 Flint Dr., Nelson Courts, Fort Dix.
 David J. Rose, Med. Arts Bldg., Princeton Hosp., Princeton.
 Harry W. Rude, 9 Briarcliff Rd., Mountain Lakes.
 James M. Ruegsegger,** 62 Magnolia Ave., Montvale.
 Norbert Schalet, 519 Church St., Bound Brook.
 Richard H. Sharrett, 35 Farragut Rd., Plainfield.
 Milton Shoshkes, 505 Elizabeth Ave., Newark 8.
 Leo H. Siegel, 234 Roseville Ave., Newark 7.
 J. James Smith,** 626 Westminster Ave., Elizabeth.
 William J. Snape,** 573 Stevens St., Camden.
 Robert K. Spiro, 59 Fremont St., Bloomfield.
 Henry A. Strade,** Round Top Rd., Bernardsville.

John R. Wolgamot, 244 W. Main St., Moorestown.

NEW MEXICO

Thomas B. Gibbons, 923 Copper Ave., N. E., Albuquerque.
 Paul H. Noth,** Los Alamos Hosp., Los Alamos.

NEW YORK

Alfred A. Angrist,** Albert Einstein Coll. of Med., Bronx 61.
 Irvin M. Arias, Crestwood Lake Apartments, 8 Cleveland Pl., Yonkers.
 Charles A. Ashley, Lakeview Dr., P. O. Box 505, Cooperstown.
 Harold Bedell,** 45 No. Station Plaza, Great Neck, Long Island.
 Joseph G. Benton,** Respiratory and Rehabilitation Center, N. Y. U.-Bellevue Med. Center, Goldwater Memorial Hosp., Welfare Island 17.
 Louis Berlin,** 99 Pennsylvania Ave., Mount Vernon.
 Stanley H. Bernstein, 5 Waring Dr., Manhasset, Long Island.
 Robert W. Bertcher, 195 No. Village Ave., Rockville Centre.
 Charles A. Bertrand, 280 Mamaroneck Ave., White Plains.
 Lester J. Besen, 162 Wyndcliff Rd., Scarsdale.
 Saul Boyarsky, 18 Karen Lane, New Rochelle.
 J. Leonard Brandt, 380 Westwood Rd., Woodmere.
 Bernard N. Brodoff, 1255 No. Ave., New Rochelle.
 Henry Brown, 17 Ernest Dr., Scarsdale.
 Ray K. Brown, New Salem Rd., R. D. 2, Voorheesville.
 Morton Samuel Bryer,** 162-21 Powells Cove Blvd., Beechhurst 57.
 Capt. George L. Calvy, MC U.S.N.,** U. S. Naval Hosp., St. Albans.
 Asher S. Chapman,** 10 Edgewood Rd., Glen Cove, Long Island.
 Maurice R. Chassin,** 61-42 Maspeth Ave., Maspeth.
 Theodore Chenkin, N.Y.U. Med. Res. Service, Goldwater Memorial Hosp., Welfare Island 17.
 Eugene P. Cronkite,** Brookhaven National Lab., Upton, Long Island.
 Edwin J. de Beer,** 264 Scarsdale Rd., Tuckahoe 7.
 DuMont F. Elmendorf, Jr., R. D., Feura Bush, Albany County.
 Herbert K. Ensworth,** 608 E. State St., Ithaca.
 Doris J. W. Escher,** 1197 Post Rd., Scarsdale.
 Aaron Feder,** 40-42 75th St.,

Jackson Heights 73.
 Joseph W. Ferrebee,** Fable Farm, Cooperstown.
 Ben Fisher, 58 Grayton Rd., Tonawanda.
 Martin M. Fisher,** 280 Daisy Farms Dr., Scarsdale.
 James Flexner,** 15 Chester Ave., White Plains.
 Charles W. Frank, 66 Wood Ave., Ardsley.
 Albert L. Freedman, 43 Birchwood Park Dr., Jericho.
 Kenneth Fremont-Smith, Bassett Hosp., Cooperstown.
 Bertram Fuchs,** 509 Fulton Ave., Hempstead.
 Solomon Garb, 14 Albin Rd., Delmar.
 Francis S. Gerbasi, 2 Linden Pl., Glen Head, Long Island.
 Robert James Gilston,** 237 Guy Park Ave., Amsterdam.
 Abraham Gootnick,** 26 Old Brick Rd., Roslyn Heights.
 William J. Grace,** 25 Derby Rd., Port Washington.
 Louis W. Granirer,** 90-36 149th St., Jamaica.
 Irving Greenfield,** 799 Central Ave., Woodmere, L.I.
 Ezra M. Greenspan, 805 Wilmot Rd., Scarsdale.
 Leonard N. Hallinger, 140 Lockwood Ave., New Rochelle.
 Jacob P. Halperin, 40 Michael Dr., Scarsdale.
 Alfred Halpern, 11 Hampton Ct., Great Neck.
 George H. Hitchings,** The Wellcome Research Lab., Tuckahoe 7.
 Halsted R. Holman, 12-55-116th St., College Point, Queens 56.
 Allen E. Hussar,** V.A. Hosp., Montrose.
 George S. Husson,** 122 Edwards Dr., Fayetteville.
 Israeli A. Jaffe, 10-54 Burton St., Whitestone.
 Mennasch Kalkstein,** 209-17 Union Turnpike, Bayside.
 Irwin Katzka, 2035 Lakeville Rd., New Hyde Park, Long Island.
 William M. Kelly, 207 W. 6th St., Elmira.
 Stuart Krohn,** 18 Hopper St., Utica 2.
 Edgar P. Mannix, Jr.,** 12 Forest Turn, Manhasset, Long Island.
 Herbert Mark, 1 Bryant Crescent, White Plains.
 Lester C. Mark, 1648 Vincent Ct., Wantagh, Long Island.
 Leo M. Meyer,** 43 South Lewis Pl., Rockville Centre.
 Robert N. Monaco, 8064 Dumfries Pl., Jamaica 32.
 Marvin Moser, 280 Mamaroneck Ave., White Plains.

Daniel J. Nathan, 25 So. Village Ave., Rockville Centre.
 Charles Neuman, ** 2 Schuyler St., New Rochelle.
 William J. Noble, 1554 Northern Blvd., Manhasset.
 Irwin Nydick, 2727 Palisades Ave., Riverdale.
 Sanford Pariser, 498 No. Brookside Ave., Freeport, Long Island.
 Olof Pearson, ** 36 Garretson Rd., White Plains.
 Thomas Donald Penrick, 25 2nd St., Troy.
 Malcolm L. Peterson, 30 Prescott Ave., Bronxville.
 Anastas Thomas Petro, 217 E. 6th St., Jamestown.
 Richard F. Platzer, ** Clifton Springs Sanitarium and Clinic, Clifton Springs.
 Murray Quinn, 10 No. Broadway, White Plains.
 Saul F. Rabiner, 273 Hillturn Lane, Roslyn Heights.
 David E. Rogers, 670 James St., Pelham Manor.
 Hendrick M. Rozendaal, ** 2128 Rosendale Rd., Schenectady.
 Joseph R. Rubini, Med. Dept., Brookhaven National Lab., Upton, Long Island.
 Daniel Rudman, 16 Burbank St., Yonkers.
 Herman David Ruskin, ** 85 Salem Rd., Rockville Centre.
 Henry I. Russek, ** 176 Hart Blvd., Staten Island 1.
 Bernard A. Sachs, 40 Leighton Ave., Yonkers 5.
 Alex Sahagian-Edwards, 2714 Netherland Ave., Riverdale 63.
 Arthur Sawitsky, ** 15 The Hemlocks, Roslyn.
 Peter P. Schmidt, ** 269 N. Merrick Ave., Merrick.
 Ralph F. Schneider, ** 72 3rd St., Garden City, Long Island.
 Lewis R. Schumacher, 42 Keswick Lane, Plainview, Long Island.
 Ernest Schwartz, V.A. Hosp., 130 W. Kingsbridge Rd., Bronx 68.
 Donald S. Searle, ** 200 Hillcrest Rd., Mount Vernon.
 John C. Seed, Wellcome Research Lab., Tuckahoe 7.
 David Selman, ** 24 S. Main St., Spring Valley.
 John T. Sharp, 33 Belmont Ave., Kenmore 23.
 Bernard B. Siegel, 1301 Cornaga Ave., Far Rockaway.
 A. Alfred Solomon, ** Diplomate American Board of Urology, 769 Empire Ave., Far Rockaway.
 Daniel J. Stone, 130 W. Kingsbridge Rd., Bronx 68.
 Robert D. Sullivan, 47-04 Han-

ford St., Douglaston, Long Island.
 Angelo Taranta, Irvington House, Irvington-on-Hudson.
 Donald E. Taylor, 168-18 Goethals Ave., Jamaica.
 Robert C. Taymor, 650 Central Ave., Cedarhurst.
 Edward D. Thomas, Mary Imogene Bassett Hosp., Cooperstown.
 Louis B. Turner, 12 Nob Hill Gate, Roslyn, L.I.
 Louis J. Vorhaus, 1 Ploughman's Bush, Riverdale 71.
 Louis Weisfuse, ** 131 Fulton Ave., Hempstead.
 Charles Weller, ** 17 No. Chatsworth Ave., Larchmont.
 Charles A. Werner, 3 Hamilton Lane, Cold Spring Hills, Huntington.
 Arthur R. Wertheim, ** Columbia Univ. Research Service, Goldwater Memorial Hosp., Welfare Island.
 M. Henry Williams, Jr., Cardio-respiratory Lab., Grasslands Hosp., Valhalla.
 W. Brewster Wolfe, 288 Grand St., Newburgh.
 John R. Wood, ** 50 Popham Rd., Scarsdale 1.
Albany
 Joseph T. Doyle, Albany Med. Coll.
 Thomas F. Frawley, Dept. of Endocrinology and Metabolism, Albany Med. Coll.
 Charles A. Hall, V.A. Hosp., Holland Ave.
 Albert H. Harris, ** State Health Dept. Lab.
 John E. Kiley, Albany Med. Coll.
 William P. Nelson, III, 2 Glenwood St., McKownville.
 Samuel R. Powers, Jr., Dept. of Surgery, Albany Hosp.
 John W. Runyan, Jr., Albany Med. Coll.
 David W. Sinton, Dept. of Neurology, Albany Hosp.
 Arthur W. Wright, ** Albany Med. Coll.
Brooklyn
 Stanley August, 1590 E. 19th St.
 Robert Austrian, ** A Bldg., Kings County Hosp.
 Anthony Caccese, 102-82nd St.
 Mortimer R. Cholst, ** 1 Nevins St.
 William S. Collens, ** 123-8th Ave.
 Albert W. Cook, 200 Hicks St.
 Robert Dickes, ** 1304 Ditmas Ave.
 John N. Edson, ** 142 Joralemon St.
 Samuel Epstein, ** 700 Ocean Ave.
 Saul J. Farber, 1-74th St.

John T. Finkenstaedt, Dept. of Biochemistry, State Univ. of New York, 450 Clarkson Ave.
 Victor Ginsberg, ** 255 Eastern Parkway.
 Richard Gubner, ** 25 Lefferts Ave.
 Jacob Halpern, ** 403 E. 19th St.
 Milton B. Handelsman, ** Med. Arts Bldg., 142 Joralemon St.
 David H. Klasson, ** 129 Clarkson Ave.
 O. Dhadanand Kowlessar, 2709 Tilden Ave.
 Irving G. Kroop, ** 20 Plaza St.
 Thomas F. Leo, State Univ. of New York Coll. of Med., 451 Clarkson Ave.
 Leon M. Levitt, ** 14 E. 16th St.
 M. C. Li, 9902-3rd Ave.
 Herbert C. Lichtman, 1381 E. 46th St.
 Harold A. Lyons, ** State Univ. of New York Coll. of Med., 451 Clarkson Ave.
 Murray M. Mahl, 1111 Ocean Ave.
 Leonard E. Meiselas, 50 Plaza St.
 Max Michael, Jr., ** Maimonides Hosp., 4802 10th Ave.
 Max B. Milberg, ** 571 Ocean Ave.
 Louis Pelner, ** 1352 Carroll St.
 Charles M. Plotz, 1183 E. 23rd St.
 Norton D. Ritz, ** 2729 Bedford Ave.
 Felix A. Silverstone, 1142 Ocean Ave.
 Samuel H. Spitz, ** 19 Grace Ct.
 Richard W. Stone, 420-77th St.
 Felix Taubman, ** 41 Eastern Parkway.
 Samuel Waldman, ** 1401 President St.
 Stanley L. Wallace, 166 E. 59th St.
 R. Janet Watson, ** 235 Adams St.
 Aaron Weisberg, ** 1060 Ocean Ave.
 Burton L. Zohman, ** 7223 Ft. Hamilton Parkway.
 Barnett Zumoff, 3710 Bedford Ave.
Buffalo
 Clara M. Ambrus, 270 Lakewood Parkway, Snyder.
 Julian L. Ambrus, Roswell Park Memorial Inst., 666 Elm St.
 O. J. Bateman, Jr., ** 40 No. St.
 Grosvenor W. Bissell, Chief, Med. Service, V.A. Hosp., 3495 Bailey Ave.
 Marvin L. Bloom, 333 Linwood Ave.
 Roswell K. Brown, ** 596 Delaware Ave.
 Kenneth W. Buchwald, ** 666 Elm St.

Ivan L. Bunnell, ** Buffalo Gen. Hosp., 100 High St.
 William H. C. Chapple, 2577 Main St.
 James A. Curtin, Buffalo Gen. Hosp., 100 High St.
 James T. Grace, Jr., Roswell Park Memorial Inst., 666 Elm St.
 David G. Greene, ** Buffalo Gen. Hosp., 100 High St.
 Ramsdell Gurney, ** 537 Delaware Ave.
 James F. Holland, Roswell Park Memorial Hosp., 666 Elm St.
 L. Edgar Hummel, ** 134 Morris Ave.
 Francis E. Kenny, ** 143 Linwood Ave.
 Robert M. Kohn, 131 Linwood Ave.
 Alfred R. Lenzner, 40 No. St.
 L. Maxwell Lockie, ** 40 No. St.
 William D. Loeser, 2183 Main St.
 Frank Meyers, ** 537 Delaware.
 George E. Miller, Buffalo Gen. Hosp., 100 High St.
 Erwin Neter, ** Children's Hosp., 219 Bryant St.
 James E. Patterson, ** 22 Woodhaven Rd.
 T. C. Prentice, 73 Lexington Ave.
 Simon Rodbard, ** Chronic Disease Res. Inst., 2183 Main St.
 Avery A. Sandberg, Roswell Park Memorial Inst., 666 Elm St.
 Oleg S. Selawry, Roswell Park Memorial Inst., 666 Elm St.
 Joseph E. Sokal, ** Roswell Park Memorial Inst.
 Robert Tarail, Metabolic Section, Roswell Park Memorial Inst., 666 Elm St.
 Stuart L. Vaughan, ** 187 Linwood Ave.
 Walter T. Zimdahl, 2183 Main St.

New York City

David Adlersberg, ** Mt. Sinai Hosp.
 Thomas P. Almy, ** 2nd Med. Div., Bellevue Hosp.
 Reginald M. Archibald, ** Rockefeller Inst. Hosp., 66th St. and York Ave.
 Mortimer E. Bader, 1176 5th Ave.
 Richard A. Bader, 1176 5th Ave.
 David S. Baldwin, 20 E. 68th St.
 Harold G. Barker, ** Columbia Presbyterian Med. Center, 622 W. 168th St.
 Jeremiah A. Baroness, 42 E. 65th St.
 David V. Becker, The New York Hosp., 525 E. 68th St.
 E. Lovell Becker, Dept. of Med., New York Hosp.-Cornell Med. Center, 525 E. 68th St.

Morris B. Bender, ** 1150 Park Ave.
 Richard S. Benua, 444 E. 68th St.
 Adolph R. Berger, ** 22 E. 36th St.
 Eugene Y. Berger, 3640 Johnson Ave., Riverdale.
 Lawrence Berger, 2630 Kingsbridge Terrace, Bronx 63.
 Philip S. Bergman, 1148 5th Ave.
 Herman Black, 516 E. 78th St.
 Richard C. Bozian, N. Y. U.-Bellevue Med. Center, 550 1st Ave.
 Warren S. Braverman, 2nd (Cornell) Med. Div., Bellevue Hosp., 1st Ave. and 26th St.
 Donald K. Briggs, 233 E. 69th St.
 J. Marion Bryant, ** N. Y. U. Postgraduate Med. School, 550 1st Ave.
 Joseph H. Burchenal, Memorial Hosp., 444 E. 68th St.
 J. Scott Butterworth, ** 104 E. 40th St.
 Mrs. Kenneth Calder, 110 E. 78th St.
 Henry A. Carr, ** 232 E. 66th St.
 Anne C. Carter, 33 E. 70th St.
 Robert B. Case, Saint Luke's Hosp., 113th St. and Amsterdam Ave.
 David Chalfin, 393 West End Ave.
 Loring F. Chapman, Apt. 12-U, 445 E. 68th St.
 William N. Christenson, 525 E. 68th St.
 Nicholas P. Christy, Presbyterian Hosp., 620 W. 168th St.
 William S. Clark, ** The National Foundation for Infantile Paralysis, 301 E. 42nd St.
 Abraham George Cohen, ** 52 E. 73rd St.
 Eugene Jerrin Cohen, ** 525 E. 68th St.
 Henry Colcher, ** 4658 Grosvenor Ave.
 Harvey Shields Collins, ** Memorial Hosp., 444 E. 68th St.
 Vincent J. Collins, ** N. Y. U.-Bellevue Med. Center, 550 1st Ave.
 A. Dale Console, ** 745 5th Ave.
 Irving S. Cooper, 50 Sutton Place So.
 Simon Dack, 1111 Park Ave.
 Michael Dacso, ** Dept. of Physical Med. and Rehabilitation, Goldwater Memorial Hosp., Welfare Island.
 Kurt DeCrinis, 98 Riverside Dr.
 Arthur C. De Graff, ** 850 Park Ave.
 Norman Deane, 112 E. 74th St.
 Felix E. Demartini, Columbia Presbyterian Med. Center, 622 W. 168th St.

Quentin B. Deming, 1st (Columbia) Div., Goldwater Memorial Hosp., Welfare Island.
 Henry D. Diamond, Memorial Hosp., 444 E. 68th St.
 Martin Dolgin, V.A. Hosp., 408 1st Ave.
 Henry Doubilet, ** 71 E. 77th St.
 Samuel Dvoskin, ** 180 Cabrini Blvd.
 David A. Dreiling, 171 W. 57th St.
 Murray Dworetzky, 50 E. 78th St.
 Morton H. Edelman, ** 21 E. 66th St.
 Samuel K. Elster, 994 5th Ave.
 Ralph L. Engle, Jr., 525 E. 68th St.
 Jeanne A. Epstein, N.Y.U. Bellevue Med. Center, 550 1st Ave.
 John T. Farrar, Manhattan V.A. Hosp., 408 1st Ave.
 Alvan R. Feinstein, New York Univ. Coll. of Med., 22 E. 36th St.
 Daniel J. Feldman, ** Inst. of Physical Med. and Rehabilitation, 400 E. 34th St.
 Daniel S. Feldman, 2 E. 92nd St.
 Elaine B. Feldman, 2 E. 92nd St.
 M. Irene Ferrer, ** 10 E. 66th St.
 Leonard E. Field, ** 125 E. 72nd St.
 John A. Finkbeiner, Memorial Center, 444 E. 68th St.
 Edward E. Fischel, The Bronx Hosp., 1276 Fulton Ave.
 Alfred P. Fishman, 541 E. 20th St.
 Robert Allen Fishman, Presbyterian Hosp., Neurological Inst., 630 W. 168th St.
 Gerald H. Flamm, 1225 Park Ave.
 John T. Flynn, 1060 Park Ave.
 Charles L. Fox, Jr., ** New York Med. Coll., Flower and 5th Ave. Hosp., 1 E. 105th St.
 Theodore T. Fox, ** 944 5th Ave.
 Edward C. Franklin, The Rockefeller Inst. for Med. Res., 66th St. and York Ave.
 Louis Freedman, ** 250 E. 43rd St.
 Charles K. Friedberg, ** 1125 5th Ave.
 H. Hugh Fudenberg, The Rockefeller Inst. for Med. Res., 66th St. and York Ave.
 Gabriel Jenkins, #14A, 40 W. 86th St.
 Herbert Gershberg, N.Y.U. Med. School, 550 1st Ave.
 Menard M. Gertler, 98 Riverside Dr.
 Stanley E. Gitlow, 300 W. 23rd St.
 Robert D. Gittler, 320 West End Ave.
 George B. Jerzy Glass, ** 60 Sutton Pl., S.

Arvin S. Glicksman, Memorial Center Cancer and Allied Dis., 444 E. 68th St.

Eli S. Goldensohn, ** 710 W. 168th St.

Helen Goodell, ** 525 E. 68th St. Seymour Goodstein, 209-11 Union Turnpike, Bayside 64.

Irving Graef, ** 360 E. 55th St.

Murray A. Greene, Dept. of Med., The Bronx Hosp., Fulton Ave. and 169th St.

Roger L. Greif, ** Cornell Univ. Med. Coll., 1300 York Ave.

Arthur Grishman, ** 1176 5th Ave.

Albert W. Grokoest, ** 115 E. 67th St.

Edward B. Grossman, ** 242 E. 19th St.

Rejane M. Harvey, 10 E. 66th St.

Henry O. Heinemann, Francis Delafield Hosp., 99 Ft. Washington Ave.

Leon Hellman, 334 W. 245th St.

James G. Hilton, 115 E. 67th St.

Lawrence E. Hinkle, New York Hosp., 525 E. 68th St.

Jules Hirsch, Rockefeller Inst. for Med. Res., York Ave. and 66th St.

William M. Hitzig, ** 787 Park Ave.

Bernard C. Holland, ** 722 W. 168th St.

Calderon Howe, ** Columbia Univ. Coll. of Physicians and Surgeons, 630 W. 168th St.

William H. Hulet, 2601 Henry Hudson Parkway West.

Julian B. Hyman, 7 E. 63rd St.

Raymond S. Jackson, ** Univ. Hosp., 303 E. 20th St.

Jerry H. Jacobson, 880 5th Ave.

Harry L. Jaffe, ** 969 Park Ave.

Henry D. Janowitz, ** Mt. Sinai Hosp., 1 E. 100th St.

Alan J. Johnson, 42 W. 11th St.

Jerald S. Kalter, ** 18 E. 62nd St.

Richard J. Kaufman, Memorial Center for Cancer and Allied Dis., 444 E. 68th St.

Herbert J. Kayden, 33 East End Ave.

Thomas Killip, III, The New York Hosp., 525 E. 68th St.

S. Edward King, ** 30 E. 40th St.

Zacharias D. Komninos, Saint Vincent's Hosp.-Hematology, 7th Ave. and 11th St.

Irwin H. Krakoff, 444 E. 68th St.

Dorothy Krieger, 60 E. 96th St.

Howard P. Krieger, Mt. Sinai Hosp., 1 E. 100th St.

Leslie A. Kuhn, 1176-5th Ave.

Herbert S. Kupperman, ** New York Univ. Coll. of Med., 550 1st Ave.

John S. La Due, ** 43 W. 12th St.

Kurt Lange, ** New York Med. Coll., 1 E. 105 St.

Richard P. Lasser, 1176 5th Ave.

David H. Law, 331 E. 71st St.

Stanley L. Lee, 4 E. 89th St.

Samuel R. Lehrman, ** 141 E. 55th St.

Stephen Howard Leslie, N.Y.U. Coll. of Med., 477 1st Ave.

Marvin F. Levitt, 4 E. 89th St.

Arthur J. Lewis, Dept. of Med. N. Y. U. Coll. of Med., 550 1st Ave.

Allyn B. Ley, 444 E. 68th St.

Jerrold S. Lieberman, 11 E. 68th St.

Robert M. Lintz, ** 1100 Park Ave.

Martin Lipkin, Room F-232, 525 E. 68th St.

Winifred C. Loughlin, ** 35 E. 35th St.

Donald B. Louria, 6 Stuyvesant Oval.

Edward W. Lowman, ** 400 E. 34th St.

E. Hugh Luckey, Cornell Univ. Med. Coll., 1300 York Ave.

A. Leonard Luhby, ** Dept. of Pediatrics, Flower-Fifth Ave. Hosp.

Daniel S. Lukas, New York Hosp., 525 E. 68th St.

James E. McCormack, ** Presbyterian Hosp., 622 W. 168th St.

Walsh McDermott, ** 525 E. 68th St.

Fletcher H. McDowell, Cornell Neurological Service, Bellevue Hosp., 27th St. and 1st Ave.

Bernard Maisel, ** 1 E. 69th St.

Morton Marks, 400 E. 34th St.

Paul A. Marks, Inst. of Cancer Res., Columbia Univ. Coll. of P. & S., 630 W. 168th St.

Arthur M. Master, ** 125 E. 72nd St.

James A. L. Mathers, ** 622 W. 168th St.

Klaus Mayer, Memorial Center for Cancer and Allied Dis., 444 E. 68th St.

Raymond S. Megibow, ** 65 E. 79th St.

Milton Mendlowitz, ** 2 E. 95th St.

David W. Molander, 139 E. 36th St.

Howard L. Moscovitz, 295 Central Park West.

M. Lois Murphy, ** 444 E. 68th St.

Carl Muschenheim, ** 133 E. 64th St.

Warren Powers Laird Myers, 444 E. 68th St.

Morten Nathanson, New York Univ. Coll. of Med., 477-1st Ave.

C. Truman Nelson, ** Presbyterian Hosp., 180 Ft. Washington Ave.

Stanley R. Opler, 111 E. 76th St.

Elliot Oppenheim, ** 45 Gramercy Pk., N.

Richard H. Orr, 37 E. 67th St.

Philip Y. Paterson, Dept. of Microbiology, New York Univ. Coll. of Med., 550 1st Ave.

John M. Pearce, ** 525 E. 68th St.

Morris Pearlmuter, 54 E. 61st St.

James E. Perkins, ** 1790 Broadway.

John H. Peters, ** American Heart Association, 44 E. 23rd St.

Gerald B. Phillips, Dept. of Biochemistry, 630 W. 168th St.

Albert A. Plentl, ** 180 Ft. Washington Ave.

Charles A. Poindexter, ** 121 E. 60th St.

James W. Poppell, 444 E. 68th St.

Leon Pordy, 1150 Park Ave.

Aurelia Potor, ** 205 E. 72nd St.

George G. Reader, 525 E. 68th St.

Walter Redisch, ** 77 Park Ave.

Gabrielle H. Reem, 33 East End Ave.

Stanley Reichman, 4 W. 75th St.

Morton F. Reiser, 735 Kappock St.

Edward H. Reisner, Jr., ** 421 W. 113th St.

Harold Rifkin, ** 20 W. 86th St.

Seymour H. Rinzler, ** 120 Central Park, S.

Nathaniel S. Ritter, 350 E. 30th St.

Robert Rosenblum, 585 West End Ave.

Martin C. Rosenthal, Mt. Sinai Hosp., 1 E. 100th St.

Robert L. Rosenthal, 48 E. 91st St.

William S. Rosenthal, 400 E. 55th St.

Marcus A. Rothschild, 45 E. 85th St.

Albert L. Rubin, 2nd (Cornell) Med. Div., Bellevue Hosp., 1st Ave. at 26th St.

Paul Ruegsegger, Memorial Center for Cancer and Allied Dis., 444 E. 68th St.

Udall J. Salmon, ** Salmon Foundation for Med. Res., Inc., 1082 Park Ave.

Martin Sanders, 585 West End Ave.

Joseph Schachter, 11 Riverside Dr.

Jerome A. Schack, 975 Park Ave.
 Louis E. Schaefer, 942 5th Ave.
 Robert Schobinger, Dept. of Surgery, V.A. Hosp., 130 W. Kingsbridge Rd.
 Irving L. Schwartz, The Rockefeller Inst. Hosp., York Ave. and E. 66th St.
 John Bernard Schwedel, ** 230 W. 79th St.
 Mortimer F. Shapiro, ** 960 Park Ave.
 Seiichi Shimomura, Apt. 3-A, 90 Laurel Hill Terrace.
 Richard T. Silver, The New York Hosp., 525 E. 68th St.
 Solomon Silver, ** 14 E. 75th St.
 Martin E. Silverstein, New York Med. Coll., 1249 5th Ave.
 Marvin Herbert Sleisenger, 525 E. 68th St.
 Homer W. Smith, ** New York Univ. Coll. of Med., 550 1st Ave.
 Edna Sobel, Dept. of Pediatrics, Albert Einstein Coll. of Med.
 Robert J. Soberman, 3616 Henry Hudson Parkway, Riverdale.
 Eugene Somkin, ** 130 E. 94th St.
 S. Zelig Sorkin, ** 1148 5th Ave.
 Chester M. Southam, Sloan-Kettering Inst. for Cancer Res., 444 E. 68th St.
 Theodore H. Spaet, Montefiore Hosp., Gun Hill Rd. near Jerome Ave.
 Clifford L. Spingarn, ** 51 E. 73rd St.
 Daniel Stats, ** 8 W. 58th St.
 Herman Steinberg, 35 E. 35th St.
 Israel Steinberg, ** 170 E. 77th St.
 Morris F. Steinberg, ** 50 E. 63rd St.
 Alfred Steiner, ** 53 E. 66th St.
 Kenneth Sterling, 722 W. 168th St.
 Marguerite P. Sykes, ** Clinical Chemotherapy Div., Memorial Cancer Center, 444 E. 68th St.
 Charlotte T. C. Tan, Memorial Center Cancer & Allied Dis., 444 E. 68th St.
 William N. Thetford, 9 E. 78th St.
 Theodore T. Tsaltas, 103 E. 86th St.
 Lester Tuchman, ** 71 E. 77th St.
 Robert Turell, ** 25 E. 83rd St.
 John E. Ultmann, Inst. of Cancer Res., Columbia Univ. Coll. of Phys. and Surg., 630 W. 168th St.
 Georges Ungar, ** 924 West End Ave.
 Theodore B. Van Itallie, Saint Luke's Hosp., 118th St. and Amsterdam Ave.

Parker Vanamee, 444 E. 68th St.
 Leo J. Wade, ** Eso Standard Oil Co., 15 W. 51st St.
 John V. Waller, ** 55 E. 72nd St.
 Louis R. Wasserman, ** Mt. Sinai Hosp., 11 E. 100th St.
 Lothar Wertheimer, * 221 W. 82nd St.
 Laurence G. Wesson, Jr., 550 1st Ave.
 Abraham G. White, ** 1185 Park Ave.
 Charles F. Wilkinson, Jr., ** New York Univ. Med. School, 477 1st Ave.
 Harold Willard, ** The New York Hosp., 525 E. 68th St.
 Felix Wroblewski, 445 E. 67th St.
 George A. Zak, ** N.Y.U. Research Service, Goldwater Memorial Hosp., Welfare Island.
 Hans H. Zinsser, 242-A E. 62nd St.
 Stephen J. Zsoldos, ** Med. Chest Service, Bellevue Hosp., 1st Ave. at 26th St.

Rochester

Donald G. Anderson, ** Univ. of Rochester School of Med.
 Herbert R. Brown, Jr., ** 388 Monroe Ave.
 Robert B. Burton, 2128 Monroe Ave.
 John J. Butler, St. Mary's Hosp., 89 Genesee St.
 Joe Wiseman Howland, ** 260 Crittenden Blvd.
 Ralph F. Jaxow, ** 260 Crittenden Blvd.
 Frank W. Lovejoy, Jr., ** 260 Crittenden Blvd.
 Gerald Miller, ** Strong Memorial Hosp., 260 Crittenden Blvd.
 Ralph C. Parker, Jr., ** Rochester Regional Hosp. Council, 133 East Ave.
 Claude F. Reed, Strong Memorial Hosp.-Dept. of Med., Crittenden Blvd.
 Richard H. Saunders, Jr., Highland Hosp., South Ave. at Bellevue Dr.
 Howard B. Slavin, ** 260 Crittenden Blvd.
 Scott N. Swisher, 260 Crittenden Blvd.
 Richard B. Tobin, Univ. of Rochester School of Med., 260 Crittenden Blvd.
 Christine Waterhouse, ** Strong Memorial Hosp., 260 Crittenden Blvd.
 Edward J. Werdein, Saint Mary's Hosp.
 John R. Williams, Jr., ** 388 Monroe Ave.
 Lawrence Eugene Young, ** 260 Crittenden Blvd.

Paul N. Yu, ** 260 Crittenden Blvd.

Syracuse

J. A. Abildskov, State Univ. of New York.
 J. Howland Auchincloss, Jr., Univ. Hosp.-Med. Dept., 150 Marshall St.
 A. L. Baltch, Med. Dept., 150 Marshall St.
 William H. Bergstrom, Coll. of Med., Irving Ave.
 Leon G. Berman, ** 713 E. Genesee St.
 Paul A. Bunn, ** Dept. of Med., Univ. Hosp.
 Francis S. Caliva, 121 Feigel Ave.
 Robert B. Chodos, V.A. Hosp., Irving Ave. and Univ. Pl.
 H. Leo Dickison, ** Bristol Laboratories, Inc.
 John Joseph Duggan, Syracuse V.A. Hosp., Irving Ave.
 William W. Faloon, Univ. Hosp. of the Good Shepherd.
 Harry A. Feldman, ** State Univ. of New York Coll. of Med., 766 Irving Ave.
 Frank W. Furth, Univ. Hosp., 150 Marshall St.
 Lytt I. Gardner, Dept. of Pediatrics, Syracuse Memorial Hosp.
 Robert Gilbert, V.A. Hosp.
 Richard W. Greene, 214 Scott-holm Blvd.
 Jay Harris, 103 Skyline Bldg.
 Edward C. Hughes, ** 325 Univ. Ave.
 Andrew Kerr, Jr., ** Dept. of Med., Univ. of the State of New York.
 Philip Kramer, ** V.A. Hosp., Irving Ave. and Univ. Pl.
 Charles W. Lloyd, ** Syracuse Med. Coll., Irving Ave.
 Eugene Lozner, ** Univ. Hosp. of the Good Shepherd.
 Richard H. Lyons, ** 150 Marshall St.
 Thomas W. Mou, Upstate Med. Center, 766 Irving Ave.
 C. Barber Mueller, ** Univ. Hosp., 150 Marshall St.
 Edward W. Mullin, 600 W. Oneida St.
 Arthur B. Raffl, ** 831 James St.
 Lawrence G. Raisz, V. A. Hosp., Irving Ave. and Univ. Pl.
 Norbert B. Reicher, ** 511 E. Fayette St.
 Attilio D. Renzetti, Jr., V.A. Hosp., Irving Ave. and Univ. Pl.
 Paul A. Riemenschneider, 210 Sedgwick Dr.
 William J. Waters, 821 State Tower Bldg.

Paul F. Wehrle, 1220 Euclid Ave.
 Robert E. Westlake, 713 E. Genesee St.
 T. C. Wyatt, ** 323 Univ. Ave.

NORTH CAROLINA

Malcolm Fleshman, 2740 Fort Bragg Rd., Fayetteville.
 Ladd W. Hamrick, Jr., * 194 Lake Concord Rd., Concord.
 Richard L. Kendrick, 2500 Roswell Ave., Charlotte 9.
 Robert L. McWhorter, Jr., * 194 Lake Concord Rd., Concord.
 Ernest B. Page, Jr., 2005 Clark Ave., Raleigh.

Chapel Hill

James N. Allen, Dept. of Med., Univ. of North Carolina.
 Thomas Buchanan Barnett, North Carolina Memorial Hosp.
 William B. Blythe, North Carolina Memorial Hosp.
 Charles H. Burnett, ** Dept. of Med., Univ. of North Carolina Med. School.
 Ernest Craige, North Carolina Memorial Hosp.
 Edward C. Curnen, Jr., ** Univ. of North Carolina, School of Med.
 Janet Jordan Fischer, Dept. of Med.-Univ. of North Carolina.
 Carl W. Gottschalk, Dept. of Med., North Carolina Memorial Hosp.
 George C. Ham, ** Univ. of North Carolina, School of Med.
 Walter Hollander, Jr., 531 Dogwood Dr.
 Harry M. Meyer, Jr., Dept. of Pediatrics, Univ. of North Carolina School of Med.
 Jeffress Gary Palmer, Dept. of Med.-School of Med., Univ. of North Carolina.
 John T. Sessions, Jr., Univ. of North Carolina, School of Med.
 John K. Spitznagel, 175 Hamilton.
 Bernard G. Stall, III, Dept. of Med., School of Med., Univ. of North Carolina.
 Isaac M. Taylor, Dept. of Med., North Carolina Memorial Hosp.
 Louis G. Welt, ** Dept. of Int. Med., Univ. of North Carolina School of Med.
 Kerr L. White, ** Dept. of Med., Univ. of North Carolina School of Med.
 T. Franklin Williams, Univ. of North Carolina School of Med.
 James W. Woods, Greenwood Dr.

Durham

Morton D. Bogdonoff, Duke Hosp.

Ivan W. Brown, Jr., ** Duke Univ. Hosp.

Sanford I. Cohen, Dept. of Psychiatry, Duke Univ. School of Med.
 Evelyn V. Coonrad, 2203 Sprunt St.

George J. D'Angelo, Duke Hosp.

Marcus L. Dillon, 203 Francis St.

Edward H. Estes, Jr., 3542 Hamstead Ct.

John F. Flanagan, Duke Hosp.

Keith S. Grimson, ** Dept. of Surgery, Duke Hosp.

Albert Heyman, ** Duke Univ. School of Med.

Grace Pardridge Kerby, ** Duke Hosp.

E. Charles Kunkle, ** Duke Univ. School of Med.

Henry D. McIntosh, Duke Hosp.-Dept. of Med.

Blaine S. Nashold, Jr., 814 Watts St.

John B. Pfeiffer, Jr., ** Box 3508 Duke Hosp.

Richard Meyers Portwood, * Div. of Endocrinology, School of Med., Duke Univ.

R. Wayne Rundles, ** Duke Hosp.

Will Camp Sealy, ** Duke Hosp.

William Shapiro, 920 Lambeth Circle.

Herbert Otto Sieker, 2512 State St.

Albert J. Silverman, Dept. of Psychiatry, Duke Univ.

Eugene A. Stead, Jr., ** Duke Univ. School of Med.

Malcolm P. Tyor, Dept. of Med., Duke Univ. School of Med.

James V. Warren, ** Dept. of Med., Duke Univ. School of Med.

Arnold M. Weissler, Duke Univ. School of Med.

J. Earle White, Jr., Box 3074, Duke Hosp.

James B. Wyngaarden, Duke Univ. School of Med.

William Glenn Young, Jr., Duke Univ. Hosp.

Winston-Salem

J. R. R. Bobb, Bowman Gray School of Med.

Richard L. Burt, ** 501 Lester Lane.

David Cayer, ** Bowman Gray School of Med.

Courtland H. Davis, Jr., Bowman Gray School of Med.

John H. Felts, Bowman Gray School of Med.

Harold D. Green, ** Bowman Gray School of Med., Wake Forest Coll.

Lucile W. Hutaff, ** Bowman Gray School of Med.

M. F. Sohmer, Jr., Bowman Gray School of Med.

Charles Lewis Spurr, ** Dept. of Med., Bowman Gray School of Med.

Ernest H. Yount, Dept. of Int. Med., Bowman Gray School of Med.

NORTH DAKOTA

William E. Cornatzer, Dept. of Biochemistry, Univ. North Dakota Med. School, Grand Forks.

Edwin G. Olmstead, School of Med., Univ. of North Dakota, Grand Forks.

OHIO

Charles V. Adair, 1010 Woodland Rd., Mansfield.

Nina A. Anderson, ** 293 S. Washington Blvd., Hamilton.

Malcolm Block, ** 210 Fidelity Bldg., Dayton.

Stuart O. Bondurant, Jr., 708 South Maple Ave., Fairborn.

Edward M. Chester, ** 10 Beech, Berea.

Oscar W. Clarke, Box 240, Gallipolis Clinic, Gallipolis.

Frederick S. Coombs, Jr., ** 803 Home Savings & Loan Bldg., Youngstown.

Curtis J. Fisher, 2218 Market St., Youngstown 7.

Arnoldus Goudsmit, ** 2218 Market St., Youngstown 7.

John Wm. Harris, 3080 Coleridge Rd., Cleveland Heights.

William M. Jefferies, ** 2888 Warrington Rd., Shaker Heights 20.

Sidney Katz, 3873 Greenville Rd., University Heights 18.

Henry Kraus, 2240 Broad Blvd., Cuyahoga Falls.

Kenneth F. Lowry, ** 116 E. Franklin St., Troy.

Robert A. McDougal, Dept. of Pathology, Akron City Hosp., 525 E. Market, Akron 9.

Samuel N. Maimon, ** Reibold Bldg., Dayton 2.

Richard P. Mueller, 17844 Lake Ave., Lakewood.

Benjamin Schuster, Director, Cardiopulmonary Dept., Good Samaritan Hosp., 1425 W. Fairview Ave., Dayton 6.

Gerard Seltzer, 22935 Lorain Rd., Fairview Park.

Robert R. Stahl, State Road Med. Bldg., 5504 State Rd., Parma 29.

Murill M. Szucs, ** 800 Dollar Bank Bldg., Youngstown 3.

James Taguchi, V.A. Hosp., Dayton.

G. Douglas Talbott, 1544 Runnymede Rd., Dayton.

Leslie T. Webster, Jr., 2481 Wellington Rd., Cleveland Heights 18.

Arthur F. Young, 15648 Madison Ave., Lakewood.

Cincinnati

Jerome R. Berman, 3904 Wess Park Dr.
 Joseph P. Biehl, 342 Hill Top Lane.
 Julius J. Cohen, Dept. of Physiology, Univ. of Cincinnati Coll. of Med.
 Sanford R. Courier, 904-907 Carew Tower.
 Remo J. DiSalvo, 4334 Ridgeview Ave.
 O. Herman Dreskin, ** 707 Race St.
 Philip Edlin, 2782 Losantiridge Ave.
 Noble O. Fowler, V.A. Hosp., 3200 Vine St.
 Helen I. Glueck, ** Cincinnati Gen. Hosp.
 Richard E. Goldsmith, Cincinnati Gen. Hosp.
 Robert S. Green, ** Memorial Heart Lab., Saint Mary's Hosp.
 Irwin B. Hanenson, May Inst. for Med. Res., 421 Ridgeway Ave.
 Robert A. Helm, Dept. of Int. Med., Cincinnati Gen. Hosp.
 Arnold Iglaer, ** 771 Doctors Bldg.
 Thomas Jarrold, ** 1368 Covedale Ave.
 Robert J. Kalthoff, 730 E. Mitchell Ave.
 Samuel Kaplan, Children's Hosp.
 Frederic T. Kapp, ** 3 Revel Lane.
 Charles E. Kiely, Jr., 5 Hedge-row Lane.
 Harvey C. Knowles, Jr., ** Cincinnati Gen. Hosp.
 E. Gordon Margolin, 2650 Burnet Ave.
 John F. Mueller, Dept. of Med., Cincinnati Gen. Hosp.
 Raymond C. Pogge, ** Dept. of Med. Res., The William S. Merrell Co.
 Albert W. Schreiner, 3052 Taylor Ave.
 Ralph C. Scott, Cardiac Lab., B-4, Cincinnati Gen. Hosp.
 Nathan Shapiro, ** 708 Doctors Bldg.
 Murray B. Sheldon, Jr., Dept. of Int. Med., Cincinnati Gen. Hosp.
 Robert S. Shelton, ** 6660 Mariemont Ave.
 Leo Wayne, 535 Doctors Bldg.
 Emile E. Werk, Jr., V.A. Hosp., 3200 Vine St.
 John J. Will, Cincinnati Gen. Hosp.
 Stanley J. Wolfe, 2610 Highland Ave.

Cleveland

William E. Abbott, ** Univ. Hosp., 2065 Adelbert Rd.
 Allan C. Barnes, ** Univ. Hosp.
 John D. Battle, ** Cleveland Clinic, 2020 E. 93rd St.
 Robert M. Berne, Dept. of Physiology, Western Reserve Univ.
 Bernard L. Brofman, Mt. Sinai Hosp.-Div. of Med., 1800 E. 105th St.
 Charles H. Brown, ** Cleveland Clinic, 2020 E. 93rd St.
 Austin Chinn, ** Univ. Hosp., 2073 Abington Rd.
 Jack Westley Cole, 2065 Adelbert Rd.
 Arthur C. Corcoran, ** Cleveland Clinic Foundation, Euclid at 93rd St.
 James W. Craig, Lakeside Hosp.
 John H. Davis, Surgical Metabolic Unit, Dept. of Surgery, 2065 Adelbert Rd.
 Victor G. De Wolfe, Cleveland Clinic, 2020 E. 93rd St.
 Floyd W. Denny, Jr., Dept. of Preventive Med., Western Reserve Univ. School of Med.
 William R. Drucker, 2890 Woodbury Rd.
 Harriet P. Dustan, Cleveland Clinic Foundation.
 Amasa B. Ford, 2073 Abington Rd.
 George J. Gabuzda, Jr., Cleveland City Hosp., 3395 Scranton Rd.
 Harold S. Ginsberg, ** Dept. of Preventive Med., School of Med., Western Reserve Univ.
 Robert C. Griggs, City Hosp.
 Edward O. Hahn, 21535 Lorain Rd.
 William R. Hallaran, ** 9925 Lake Shore Blvd.
 Thomas Hale Ham, ** Western Reserve Univ. School of Med., 2109 Adelbert Rd.
 Frank R. Hanrahan, Jr., 407 Osborn Bldg.
 James Spencer Hewlett, Dept. of Hematology, The Cleveland Clinic, 2020 E. 93rd St.
 Carl Frederick Hinz, Jr., 2109 Adelbert Rd.
 Harold B. Houser, Dept. of Preventive Med., Western Reserve Univ.
 Charles L. Hudson, ** 10525 Carnegie Ave.
 Scott Russell Inkley, 2102 Abington Rd.
 Jerome Kleinerman, Associate Director of Med. Res., Saint Luke's Hosp., 11311 Shaker Blvd.
 Edward M. Kline, ** 10515 Carnegie Ave.
 Norman J. Kozokoff, 10515 Carnegie Ave.

Stanley Levey, ** Univ. Hosp., 2065 Adelbert Rd.

Erwin Levin, 608 Keith Bldg.
 Bennett Levine, Mt. Sinai Hosp., 1800 E. 105th St.

Richard P. Levy, 2065 Adelbert Rd.

Hubert F. Loyke, 3155 West Blvd.

E. Perry McCullagh, ** Cleveland Clinic.

Max Miller, ** 2065 Adelbert Rd.
 Thomas William Moir, Univ. Hosp., 2065 Adelbert Rd.

Arthur D. Nichol, ** St. Luke's Hosp., 11311 Shaker Blvd.

O. Robert Oseasohn, Dept. of Preventive Med., Western Reserve Univ.

Francis Joseph Owens, 2020 E. 93rd St.

J. E. Owens, 3886 Rocky River Dr.

Lester Persky, 2065 Adelbert Rd.

Walter H. Pritchard, ** 2065 Adelbert Rd.

Abdul N. Rahman, City Hosp., 3395 Scranton Rd.

Louis Rakita, Cleveland City Hosp.

Charles H. Rammekamp, ** Dept. of Res. Lab., Cleveland City Hosp., 3395 Scranton Rd.

Oscar D. Ratnoff, ** Univ. Hosp., 2065 Adelbert Rd.

Irving Rothchild, ** Dept. of Obstetrics and Gynecology, Univ. Hosp., 2065 Adelbert Rd.

Salvatore M. Sancetta, Cleveland City Hosp.

Arthur L. Scherbel, Cleveland Clinic, 2020 E. 93rd St.

Roland E. Schneckloth, Cleveland Clinic.

A. Benedict Schneider, ** 10515 Carnegie Ave.

W. B. Seymour, ** 2102 Abington Rd.

Penn G. Skillern, 2020 E. 93rd St., Cleveland Clinic.

Leif G. Suhrland, Univ. Hosp.

Howard S. Van Ordstrand, ** 2020 E. 93rd St.

Austin S. Weisberger, ** Lakeside Hosp.

Russell Weisman, Jr., 2065 Adelbert Rd.

Richard N. Westcott, 2020 E. 93rd St.

Henry A. Zimmerman, ** 250 Hanna Bldg.

Columbus

Robert James Atwell, Ohio Tuberculosis Hosp., Ohio State Univ. Campus.

Floyd M. Beman, 310 East Torrence Rd.

J. M. B. Bloodworth, Jr., 2067 Haviland Rd.

Bertha A. Bouroncle, Dept. of Res. Med., Kinsman Hall, Ohio State Univ.

Thomas E. Clark, ** 9 Butbles Ave.

Fred G. Conrad, 1450 Broadview.

C. Joseph DeLor, ** 2094 Tremont Center.

Charles Austin Doan, ** Dean, College of Med., O.S.U., Hamilton Hall.

Matthew C. Dodd, ** Dept. of Bacteriology, Ohio State Univ.

Norman E. Goulder, ** 41 South Grant Ave.

George J. Hamwi, ** 2367 Club Rd.

John Houston Holzaepfel, ** The Univ. Hosp.

Don M. Hosier, Children's Hosp., 17th St. and Livingston Park.

Hugh B. Hull, Univ. Hosp.

R. W. Kissane, ** 9 Butbles Ave.

Ruth A. Koons, ** 9 Butbles Ave.

William G. Myers, ** 2724 Wexford Rd.

William Allen Newton, Jr., The Children's Hosp. of Columbus, 17th St. & Livingston Park.

Beryl Oser, 933 So. High St.

Joseph M. Ryan, Dept. of Med. Univ. Hosp., Ohio State Univ.

James F. Schieve, 76 W. Henderson Rd.

Howard D. Sirak, 154 Stanbery Ave.

Thomas G. Skillman, 2449 Kensington Rd.

Joseph F. Tomashefski, Ohio Tuberculosis Hosp., Ohio State Univ. Campus.

Robert L. Wall, Ohio State Univ., Kinsman Hall.

Henry E. Wilson, Jr., ** Kinsman Hall, Ohio State Univ.

Toledo

Basil D. Anagnost, ** 123-17 St.

George T. Booth, ** 1031 Secor Hotel.

Frederick M. Douglass, 421 Michigan St.

Edmond F. Glow, ** 3118 Kenwood Blvd.

Mervin E. Green, ** 2140 Scottwood Ave.

John F. Hillbrand, ** 413 Michigan St.

Richard Hotz, ** 421 Michigan St.

Don C. Nouse, 1915 Parkwood Ave.

Frank F. A. Rawling, ** 316 Michigan St.

Richard L. Schafer, 316 Michigan St.

Maurice A. Schnitker, ** 1006 Secor Hotel Bldg., Jefferson at Superior.

Bert Seligman, ** 1118 Sylvania Ave.

Gordon M. Todd, 1006 Secor Hotel Bldg.

OKLAHOMA

Mervin L. Clark, 1320 Avondale Dr., Norman.

Harold H. Jones, Jr., 105 N. First, Ponca City.

Ceylon S. Lewis, Jr., 501 Med. Arts Bldg., Tulsa.

Robert I. Lubin, 206 Utica Square Med. Center, Tulsa 14.

William J. Osher, 608 Med. Arts Bldg., Tulsa 19.

Oklahoma City

Robert Bird, ** Univ. Hosp., 800 N. E. 13th St.

John Palmer Colmore, Univ. Hosp., 800 N. E. 13th St.

Loyal L. Conrad, 800 N. E. 13th St.

Carl R. Doering, ** Dept. of Preventive Med., Univ. of Oklahoma School of Med.

Leonard P. Eliel, ** 825 N. E. 13th St.

Robert H. Furman, Oklahoma Med. Res. Inst.

James A. Hagans, Biostatistical Unit, Univ. of Oklahoma School of Med.

Thomas H. Haight, 800 N. E. 13th St.

James F. Hammarsten, Route 4, Box 25.

Charles M. Harvey, 2900 N. W. 67th St.

R. Palmer Howard, ** Oklahoma Med. Res. Inst. Hosp., 825 N. E. 13th St.

Philip C. Johnson, V.A. Hosp., 921 N. E. 13th St.

Rene B. Menguy, 1011 Dean Pl.

Reynold Patzer, ** 217 N. W. 13th St.

Harris D. Riley, Jr., Dept. of Pediatrics, Univ. of Oklahoma Med. Center.

John A. Schilling, 800 N. E. 13th St.

Robert A. Schneider, ** Univ. Hosp., 800 N. E. 13th St.

William W. Schottstaedt, ** 1129 N. E. 16th St.

William O. Smith, 2536 N. W. 49th St.

Kelly M. West, 233 N. W. 33rd.

Louis J. West, Univ. of Oklahoma Med. Center, 800 N. E. 13th St.

Stewart Wolf, ** Univ. Hosp., 800 N. E. 13th St.

OREGON

H. R. Allumbaugh, ** Med. Center, Eugene.

Raymond E. Anderson, 1275 Progress, McMinnville.

Kurt W. Aumann, ** 249 N. 31st

St., Corvallis.

Ray L. Casterline, 832 E. Main St., Medford.

Richard H. Ettinger, * Bend Memorial Clinic, 409 E. Greenwood, Bend.

Dwight H. Findley, ** 7 Myrtle St., Medford.

Harmon Thomas Harvey, ** 585 So. Winter, Salem.

Max W. Hemingway, ** 853 Wall St., Bend.

Ralph E. Hibbs, ** 1032 W. Main, Medford.

Lewis J. Krakauer, Corvallis Clinic, 530 No. 27th St., Corvallis.

Theodore M. Lundy, ** Eugene Clinic, Eugene.

Clyde J. Rademacher, ** Box 390, Bend.

Noel B. Rawls, ** Astoria Clinic, Astoria.

Charles E. Reed, Corvallis Clinic, Corvallis.

James A. Riley, The Corvallis Clinic, Corvallis.

Jon V. Straumfjord, ** Box 25, Astoria.

Nicholas P. Sullivan, ** 304 Eugene Med. Center, Eugene.

Merle H. Swansen, ** 921 Main St., Klamath Falls.

Portland

Russell J. Alleman, ** 4212 N. E. Broadway.

Howard E. Allen, ** 1216 S. W. Yamhill St.

Russell Baker, ** 1020 S. W. Taylor.

George Arthur Boylston, ** 1216 S. W. Yamhill.

William Cohen, ** 539 Med. Arts Bldg.

Robert J. Condon, 303 Jackson Tower.

Rudolph M. Crommelin, ** 205 Med.-Dent. Bldg.

Norman A. David, ** Univ. of Oregon Med. School.

Samuel L. Diack, ** 1216 S. W. Yamhill St.

H. Lenox H. Dick, ** 505 Med.-Dent. Bldg.

Charles T. Dotter, 4004 S. W. Greenleaf Dr.

William P. Galen, 2311 N. W. Northrup St.

Morton J. Goodman, ** 2311 N. W. Northrup.

Monte A. Greer, Univ. of Oregon Med. School.

Charles M. Grossman, ** 301 Selling Bldg.

Hance F. Haney, ** Dept. of Med., Univ. of Oregon Med. School.

Carl G. Heller, ** 1920 N. W. Johnson St.

William Wayne Hurst, 908 S. W. Cheltenham St.

Huldrick Kammer, ** Suite 105,
2311 N. W. Northrup St.

Roger H. Keane, ** 624 Mayer
Bldg.

Robert D. Koler, Div. of Experimental Med., Univ. of Oregon Med. School, 3181 S. W. Sam Jackson Park Rd.

John J. Krygier, ** 812 S. W. Washington.

Donald H. Labby, ** Univ. of Oregon Med. School, 3181 S. W. Sam Jackson Park Rd.

Howard P. Lewis, ** 3181 S. W. Sam Jackson Park Rd.

L. A. Lodmell, ** 1108 Standard Insurance Bldg.

Elton L. McCawley, ** 210 N. E. Laurelhurst Pl.

Guy R. McCutchan, ** 7516 N. E. Sacramento.

Raymond A. McMahon, ** 414 Med.-Dent. Bldg.

Barney Malbin, ** Suite 6, 1920 N. W. Johnson St.

Leo J. Meienberg, ** 514 Mayer Bldg.

Robert F. Miller, ** 812 S. W. Washington St.

Donald E. Olson, 8375 S. W. Crestwood Lane.

Edwin E. Osgood, ** Univ. of Oregon Med. School.

James G. Perkins, ** 8200 S. W. 19th Ave.

Frank Perlman, ** 406 Med.-Dent. Bldg.

Donald E. Pickering, Dept. of Pediatrics, Univ. of Oregon Med. School.

Bernard Pirofsky, 10223 S. W. Lancaster Rd.

Leon Frank Ray, ** 628 Med.-Dent. Bldg.

Demetrios A. Rigas, Univ. of Oregon Med. School, 3181 S. W. Sam Jackson Park Rd.

Edward E. Rosenbaum, ** 4444 S. W. Fairhaven Dr.

Marvin Schwartz, ** 3021 N. W. Greenbriar Terrace.

William C. Scott, ** 4212 E. Broadway.

Arthur J. Seaman, ** Div. of Experimental Med., Univ. of Oregon Med. School, 3181 S. W. Sam Jackson Park Rd.

Franz R. Stenzel, ** 2037 N. W. Lovejoy.

David K. Taylor, ** The Bodine-Cantil Clinic, 1735 North Wheeler Ave.

Joseph B. Trainer, ** Univ. of Oregon Med. School, 3181 S. W. Sam Jackson Park Rd.

Ben Vidoff, ** 919 S. W. Taylor St.

PENNSYLVANIA

Fred Alexander, ** 1400 Youngsford Rd., Gladwyne.

John D. Alexander, Buck and Doe Run Valley Farm, R. D. # 4, Coatesville.

Walter L. Arons, 14 Valley Rd., Drexel Hill.

Gilbert M. Bayne, Dept. of Res. Therapeutics, Norristown State Hosp., Norristown.

William C. Beck, ** Guthrie Clinic, Robert Packer Hosp., Sayre.

Bernard Harvey Berman, ** 331 Washington Trust Bldg., Washington.

Lewis W. Bluemle, Jr., 520 Twin Oaks Dr., Wynnewood.

William P. Boger, ** Glenhardie Rd., Wayne.

William R. Brink, 410 Locust St., Williamsport.

John W. Bryfogle, 837 Yeadon Ave., Yeadon.

William N. Campbell, Chester Hosp., 9th and Barclay Sts., Chester.

Bertram J. Channick, 118 E. Montgomery Ave., Bala Cynwyd.

Hadley L. Conn, Jr., Boxwood Rd., Rosemont.

David B. Coursin, Saint Joseph's Hosp., Lancaster.

Edmund W. J. DeMaar, Merck Sharp and Dohme Res. Lab., West Point.

Thomas M. Durant, ** 1242 Lafayette Rd., Gladwyne.

Robert E. Forster, II, 721 Millbrook Lane, Haverford.

Martin N. Frank, 161 So. Easton Rd., Glenside.

Elmer H. Funk, Jr., Millbrook Rd., R. D. 1, Newton Square.

Louis T. Gabriel, Jr., ** 941 Hamilton St., Allentown.

Joseph M. Gambescia, 315 Bewly Rd., Havertown.

Thomas M. Gocke, 233 W. 8th St., Erie.

Harry Goldberg, 7913 Rolling Green Rd., Cheltenham

Elliott L. Goodman, 101 Grove Pl., Havertown.

Joseph H. Hafkenschiel, ** 553 Heath Rd., Merion.

T. Terry Hayashi, 1941 Mather Way, Elkins Park.

Guenther H. Heidorn, Oak St., Sylvan Hills, Hollidaysburg.

Herbert L. Hyman, 101 S. 17th St., Allentown.

H. Roebling Knoch, ** 201 Elmwood Blvd., York.

Walter J. Levinsky, 119 Dartmouth Rd., Bala-Cynwyd.

Edwin D. Longaker, 1628 Brookhaven Rd., Wynnewood.

Mieczyslaw S. Lopusniak, ** 618 Hazelhurst Ave., Merion Station.

M. Duane Mills, ** 517 No. 2nd St., Harrisburg.

Solomon S. Mintz, ** 369 Beaver Hollow Rd., Jenkintown.

William Edward Pease, * 1313 Derry St., Harrisburg.

Edward F. Roberts, ** 233 St. George's Rd., Ardmore.

James L. d. Roth, ** 115 Glenwood Rd., Merion Station.

John J. Sayen, ** 506 Montgomery Ave., Haverford.

Nelson H. Schimmel, West Point.

Alfred M. Sellers, 718 Arlington Rd., Penn Valley, Narberth P. O.

Paul L. Shallenberger, ** Guthrie Clinic, Sayre.

Russell D. Squires, 302 Lincoln Ave., Havertown.

S. Clyde Strickland, 7 Princeton Rd., Strafford, Wayne P. O.

William J. Taylor, Harts Run Rd., Allison Pk.

John Tredway, ** 233 West 8th St., Erie.

Howard D. Trimpi, ** 1447 Hamilton St., Allentown.

Robert S. Warner, 230 Leopard Rd., Berwyn.

Jack W. Welty, ** Owen Road and Montgomery Ave., Wynnewood.

Stanley E. Zeeman, 1119 Hamilton St., Allentown.

Philadelphia

Howard N. Baier, 3401 N. Broad St.

Earl S. Barker, Renal Section, 837 Gates Bldg., Hosp. of the Univ. of Pennsylvania.

Samuel Bellet, ** 2021 Spruce St.

Carmen T. Bello, ** 2502 So. 22nd St.

Donald Berkowitz, 700 E. Upsal St.

Mahlon Z. Bierly, Jr., Med. Dept., Box 8299.

Edward W. Bixby, 306 So. 12th St.

Tibor Bodi, Hahnemann Hosp., 230 No. Broad St.

S. Philip Bralow, 2104 Delancey Pl.

Stanley A. Briller, Hosp. of the Univ. of Pennsylvania, 3400 Spruce St.

Frank P. Brooks, Hospital of the Univ. of Pennsylvania, 3400 Spruce St.

Manuel Cardenas, 1338 Gowen Ave.

John Kapp Clark, ** Univ. Hosp.

Edwin M. Cohn, ** 4652 No. Warnock St.

Edward S. Cooper, 450 So. 57th St.

Adolph J. Creskoff, ** 3400 Spruce St.

Archer P. Crosley, Jr., 837 Gates Bldg., Hosp. of the Univ. of

Pennsylvania, 36th and Spruce Sts.
 Angelo M. Di George, St. Christopher's Hosp. for Children, 2600 No. Lawrence St.
 Janet Dickens, 631 Adams Ave.
 Daniel F. Downing, ** 8864 Norwood Ave.
 Leonard S. Dreifus, 2101 Chestnut St.
 Ferdinand Fetter, ** 322 S. 21st St.
 Albert J. Finestone, 523 W. Tabor Rd.
 Harrison F. Flippin, ** 255 S. 17th St.
 Abraham M. Frumin, ** 255 S. 17th St.
 L. W. Ginsburg, ** 139 Henley Rd., Overbrook Hills.
 Leonard S. Girsh, 5457 Arlington St.
 Lincoln Godfrey, Jr., ** 255 S. 17th St.
 Benjamin A. Gouley, ** 5577 No. Park Ave.
 Stanley Green, 6643 Torresdale Ave.
 Marshall B. Guthrie, Smith, Kline & French Lab.
 Santiago V. Guzman, Philadelphia Gen. Hosp.
 Harold A. Hanno, 1930 Chestnut St.
 Donald F. Heiman, Robinette Foundation, Hosp. of the Univ. of Pennsylvania.
 John Helwig, Jr., 3715 Chestnut St.
 Robert H. High, 2600 N. Lawrence St.
 A. Yvonne Hillier, Philadelphia Gen. Hosp., 34th St. and Curie Ave.
 Basil I. Hirschowitz, 3400 No. Broad St.
 John M. Howard, Hahnemann Hosp., 230 No. Broad St.
 Harold L. Israel, ** 304 S. 19th St.
 Ralph A. Jessar, 3417 Warden Dr.
 Claude R. Joyner, 950 Gates Pavilion, Hosp. of the Univ. of Pennsylvania, 3400 Spruce St.
 Lester Karafin, Temple Univ. Hosp.
 Calvin F. Kay, ** Hosp. of the Univ. of Pennsylvania, 3400 Spruce St.
 Hans G. Keitel, Jefferson Med. Coll., 1025 Walnut St.
 Norman Kendall, ** 3401 N. Broad St.
 Alfred Kershbaum, ** 1800 S. 55th St.
 Hilary Koprowski, ** Director, The Wistar Inst., 36th St. and Woodland Ave.
 Peter T. Kuo, ** Robinette Foundation, Univ. of Pennsylvania

Hosp., 36th and Spruce Sts.
 Norman Learner, ** Suite 605, Beury Bldg., 3701 No. Broad St.
 David H. Lewis, 5829 Hoffman Ave.
 Philip Lisan, 1831 Delancy Pl.
 Stanley H. Lorber, 3701 Broad St.
 Thomas E. Machella, ** Univ. Hosp., 3600 Spruce St.
 Walter V. Matteucci, 8103 Ardmore Ave.
 Robert L. Mayock, ** 3600 Spruce St.
 Lewis C. Mills, Hahnemann Med. Coll. and Hosp., 235 No. 15th St.
 Lyndall Molthan, Temple Univ. Hosp., 3401 No. Broad St.
 John H. Moyer, The Hahnemann Med. Coll. and Hosp., 235 No. 15th St.
 Ralph M. Myerson, V.A. Hosp., Univ. and Woodland Ave.
 Maurice R. Nance, ** 1530 Spring Garden St.
 Richard Allen Neubauer, Rolling Hill Hosp., Elkins Park.
 Paul Novack, Southern Div., Albert Einstein Med. Center, 5th and Reed Sts.
 Bernard H. Pastor, 6929 Ardleigh St.
 Raymond Penneys, 2622 Lenape Rd.
 Irwin Jack Pincus, ** 269 So. 19th St.
 Edward B. Polin, 5601 No. 16th St.
 Howard P. Potter, Jr., 3400 Spruce St.
 Robert S. Pressman, ** 170 W. Olney Ave.
 Fred MacDonald Richardson, ** 160 Carpenter Lane.
 Robert Robbins, 3401 No. Broad St.
 Fred Baker Rogers, Temple Univ. Hosp., Broad and Ontario Sts.
 J. A. Rosenkrantz, ** 1505 Chelten Ave.
 J. Woodrow Savacool, ** 146 W. Tulpehocken St.
 Nathan S. Schlezinger, ** 255 S. 17th St.
 Truman G. Schnabel, Jr., Philadelphia Gen. Hosp., 34th St. and Curie Ave.
 Norman G. Schneeberg, ** 2400 No. 54th St.
 Leon Schwartz, ** 8340 Fayette St.
 David Seligson, ** 4230 Parkside Ave.
 John R. Senior, 3121 Midvale Ave.
 Marvin J. Seven, Hahnemann Hosp., 230 No. Broad St.
 Bernard Shapiro, 5450 Wissahickon Ave.
 Harry Shay, ** 3400 N. Broad St.
 Charles R. Shuman, Temple Univ. Hosp., Broad and Ontario Sts.
 Nathan M. Smukler, Wissahickon Gardens.
 William A. Sodeman, ** Jefferson Med. Coll., 1025 Walnut St.
 Andrew Sokalchuk, ** 14074 Erwin St.
 Louis A. Soloff, ** Temple Univ. Med. Center, Broad and Ontario Sts.
 Maurice Sones, ** Mount Airy Med. Bldg., Germantown and Mt. Pleasant Ave.
 Herbert M. Stauffer, ** 3401 N. Broad St.
 Howard H. Steel, 238 West Alvens Lane.
 William A. Steiger, 3401 N. Broad St.
 John R. Strawn, 3714 Walnut.
 Albert J. Stunkard, Hosp. of the Univ. of Pennsylvania, 3400 Spruce St.
 Timothy R. Talbot, Jr., ** Inst. for Cancer Res. and Lankenau Hosp. Res. Inst., 7701 Burholme Ave.
 Hasib Tanyol, ** Dept. of Physiology, Jefferson Med. Coll., 1025 Walnut St.
 Ralph R. Tyson, Temple Univ. Hosp.
 Joseph F. Uricchio, Bailey Thoracic Clinic, 249 No. Broad St.
 Jerome M. Waldron, 2300 W. Cheltenham Ave.
 William Weiss, Chief, Dept. of Pulmonary Diseases, Philadelphia Gen. Hosp., 34th St. and Curie Ave.
 Martin Wendkos, ** 4015 Baltimore Ave.
 William L. Wilson, Hahnemann Med. School and Hosp., 230 No. Broad St.
 Robert W. Winters, Dept. of Biochemistry, Univ. of Pennsylvania School of Med.
 C. Wilmer Wirts, Jr., ** 2017 Delancey Pl.
 Robert I. Wise, * Asst. Prof. Dept. of Med., Jefferson Med. Coll.
 Chris J. D. Zarafonetis, ** Temple Univ. Med. School.
 Jacob Zatuchni, 735 E. Upsilon St.
 Harry F. Zinsser, Jr., Hosp. of the Univ. of Pennsylvania, 36th and Spruce Sts.

Pittsburgh
 Mary L. Bailey, 4148 Rockwood Dr.
 William R. Bailey, Jr., Mercy Hosp.

James H. Barr, Jr., 174 McClellan Dr.
 Harry F. Bisel, 560 E. Briar Cliff Rd.
 Mark M. Bracken, ** Mercy Hosp., Pride and Locust Sts.
 Abraham I. Braude, ** Dept. of Med. Univ. of Pittsburgh School of Med.
 Philip Brostoff, 3500 5th Ave.
 Francis S. Cheever, ** Univ. of Pittsburgh, School of Public Health.
 Raymond W. Goldblum, 3500 5th Ave.
 Edward H. Hale, V.A. Hosp., Leech Farm Rd.
 Lee M. Hershenson, Med. Arts Bldg., 3700 5th Ave.
 Malcolm A. Holliday, Children's Hosp., 125 DeSoto St.
 Jerrold D. Hydovitz, 3347 Forbes St.
 Wallace N. Jensen, Dept. of Med. Univ. of Pittsburgh School of Med.
 John J. Kenny, Mercy Hosp., Pride and Locust Sts.
 Robert Klein, Children's Hosp. of Pittsburgh, 125 DeSoto St.
 William J. Kuhns, Central Blood Bank of Pittsburgh, 3601 5th Ave.
 Willoughby Lathem, Dept. of Med. Univ. of Pittsburgh School of Med.
 Jessica H. Lewis, ** Dept. of Med. Univ. of Pittsburgh.
 Albert G. Marrangoni, 152 Greenbriar Dr.
 Serafeim P. Masouredis, Central Blood Bank of Pittsburgh, Falk Clinic, Univ. of Pittsburgh Med. School.
 Frank M. Mateer, 125 DeSoto St.
 William R. Merchant, 9510 Highland Rd.
 L. Arthur Mirsky, ** Dept. of Clinical Science, Univ. of Pittsburgh, 3811 O'Hara St.
 Campbell Moses, ** 174 Crescent Hill Rd.
 Jack D. Myers, ** Chairman, Dept. of Med., Univ. of Pittsburgh School of Med.
 Robert E. Olson, Dept. of Biochem. and Nutrition, Graduate School of Pub. Health Univ. of Pittsburgh.
 Gerald P. Rodnan, Dept. of Med., Univ. of Pittsburgh School of Med.
 Alvin P. Shapiro, Dept. of Clinical Science, Univ. of Pittsburgh School of Med.
 Aaron H. Stock, ** Dept. of Microbiology, Univ. of Pittsburgh School of Med., 3630 Terrace St.
 Bertrand L. Stolzer, 423 Jenkins

Bldg.
 John W. Vester, Dept. of Biochemistry and Nutrition, Univ. of Pittsburgh, Graduate School of Pub. Health.
 Richard L. Wechsler, 3500 5th Ave.
RHODE ISLAND
 Francis H. Chafee, ** 154 Waterman St., Providence.
 Frank B. Cutts, ** 154 Waterman St., Providence.
 Erwin Oskar Hirsch, 314 Angell St., Providence.
SOUTH CAROLINA
 N. B. Baroody, Jr., 376 West Palmetto St., Florence.
 W. G. Baroody, Jr., 376 West Palmetto St., Florence.
 Richard M. Christian, Med. Arts Bldg., Greenwood.
 William R. Craig, Jr., ** Doctors Bldg., 12 South Calhoun St., Greenville.
 Haskell S. Ellison, 112 Ashley Ave., Charleston.
 Peter C. Gazes, 696 Rutledge Ave., Charleston.
 Myers H. Hicks, 220 South Irby St., Florence.
 G. B. Hodge, 3 Catawba St., Spartanburg.
 Frederick William Kinard, ** Med. Coll. of South Carolina, Charleston 16.
 C. W. Legerton, Jr., 66 Pitt St., Charleston.
 William M. McCord, ** Dept. Chemistry, Med. Coll. of South Carolina, Charleston.
 Vince Moseley, ** Dept. of Med., Med. Coll. of South Carolina, Charleston.
 James Albert Richardson, ** Dept. of Pharmacology, Med. Coll. of South Carolina, Charleston 16.
 Cheves McC. Smythe, Med. Coll. of South Carolina, 16 Lucas St., Charleston 16.
 Paul Kent Switzer, Union.
TENNESSEE
 G. A. Andrews, Jr., 520 Delaware Ave., Oak Ridge.
 Amoz I. Chernoff, Univ. of Tennessee Memorial Research Hosp., Knoxville.
 Roy S. Leadingham, ** 148 Cherry Lane, Murfreesboro.
 E. White Patton, ** 403 Doctors Bldg., Chattanooga.
 William Herman Reeder, Internal Med. Suite 602, Med. Arts Bldg., Knoxville.
Memphis
 Daniel A. Brody, ** 858 Madison Ave.
 Alvin J. Cummins, Dept. of Med., Univ. of Tennessee Coll. of Med.
 Wolcott B. Dunham, ** V. A. Med. Teaching Group, Kennedy Hosp.
 F. H. Knox, 1310 Crabapple Lane.
 Alfred P. Kraus, ** Dept. of Med. Lab., Univ. of Tennessee, 42 North Dunlap St.
 Aaron M. Lefkovits, ** Kennedy V. A. Hosp.
 J. Pervis Milnor, Jr., Suite 946M, Physicians and Surgeons Bldg., 899 Madison Ave.
 Marion Lofton Patton, ** 1753 Galloway Ave.
 Samuel Phillips, ** Kennedy Hosp.
 Gerald I. Plitman, Kennedy V. A. Hosp.
 Charles A. Rosenberg, Kennedy V. A. Hosp.
 Edward H. Storer, 3312 Homewood Dr.
Nashville
 Ben J. Alper, * 511 Med. Arts Bldg.
 William L. Alsobrook, ** 90 White Bridge Rd.
 Oscar J. Balchum, Vanderbilt Hosp.
 Allan D. Bass, ** Vanderbilt Med. School.
 Frederic T. Billings, Jr., ** 420 Med. Arts Bldg., 1211 21st Ave. So.
 George Bennett Brothers, Meharry Med. Coll.
 Benjamin F. Byrd, 2122 West End Ave.
 Ralph Jerry Cazort, ** Meharry Med. Coll.
 Frederic E. Cowden, ** 1907 Hayes St.
 William J. Darby, ** Vanderbilt Univ., School of Med., Dept. of Medicine.
 Robert M. Finks, ** 2122 West End Ave.
 Paul F. Hahn, ** Cancer Res. Lab., Meharry Med. Coll.
 Robert C. Hartmann, Vanderbilt Univ. Hosp.
 Aubrey B. Harwell, ** 108 Louise Ave.
 Joseph William Joyner, Dept. of Microbiology, Meharry Med. Coll.
 J. Allen Kennedy, ** 909 Bennie Dillon Bldg.
 Grant W. Liddle, Vanderbilt Univ. Hosp., 21st Ave.
 R. A. Light, ** 6231 Hillsboro Rd.
 George R. Meneely, ** Vanderbilt Univ. Hosp.
 H. C. Meng, ** Physiology Dept., Vanderbilt Med. School.
 Joseph M. Merrill, V. A. Hosp.

CLINICAL RESEARCH

Dan C. Roehm, 1130 Murfreesboro Rd.
 Mildred T. Stahlman, 611 Estes Ave.
 Albert Weinstein,** 511 Med. Arts Bldg., 1211 21st Ave. So.
 Clarence W. Wright,** Meharry Med. Coll.

TEXAS

Glen K. Arney, 107 Downing Dr., San Antonio.
 Paul K. Conner, Jr., Jacksboro.
 Charles K. Guttas, Beaumont Army Hosp., El Paso.
 Milton R. Hejtmancik, 816 Strand St., Galveston.
 Nicholas C. Hightower, Scott and White Clinic, Temple.
 John E. Johnson, Jr., Univ. of Texas Med. Branch, Galveston.
 Major John D. Lawson, M.C. P. O. Box 189, Brooke Army Hosp., Fort Sam Houston.
 William C. Levin,** Univ. of Texas Med. School, Galveston.
 Robert C. Little, Scott and White Clinic, Temple.
 Thomas A. Lombardo, 3155 Stagg Dr., Beaumont.
 1st Lt. Seymour W. Milstein, M.S.C. U. S. Army Surgical Res. Unit, Brooke Army Med. Center, Fort Sam Houston.
 Fitzhugh G. Pannill, Jr., Med. Arts Clinic, Corsicana.
 Marcel Patterson, Univ. of Texas-Medical Branch, Galveston.
 John L. Read, 2017 West Beau-regard Ave., San Angelo.
 Arthur Ruskin,** Univ. of Texas, Med. Branch, Galveston.
 Norman M. Scott, Jr., Brooke Army Hosp., Fort Sam Houston.
 Major Paul E. Teschan, M.C. Surgical Res. Unit, Brooke Army Med. Center, Fort Sam Houston.
 Odon F. von Werssowetz,** Medical Dir., Gonzales Warm Spring Foundation, Gonzales.
 Russell H. Wilson,** V.A. Hosp., McKinney.

Dallas

Theodore Bisland, 3707 Gaston.
 Robert T. Capps, Dept. of Anesthesia, Parkland Memorial Hosp., 5201 Harry Hines Blvd.
 Norman W. Carter,* 4345 Midleton Rd.
 Carleton B. Chapman,** Univ. of Texas Southwestern Med. School, 5323 Harry Hines Blvd.
 Burton Combes, 4420 Stanford.
 Seymour Eisenberg, 6714 Joyce Way.

Sven G. Eliasson, 5510 Mercedes.
 Robert B. Giles, Jr., Dept. of Int. Med., Univ. of Texas Southwestern Med. School, 5323 Harry Hines Blvd.
 M. J. Greve, 3710 Swiss.
 Alfred W. Harris,** Suite 208, Osler Med. Bldg., 3710 Swiss Ave.
 T. Haynes Harvill,** 1616 Med. Arts Bldg.

Howard E. Heyer,** 6035 Del Roy Dr.

James P. Lillehei, Dept. of Med. The Univ. of Texas Southwestern Med. School, 5323 Harry Hines Blvd.

Leonard L. Madison, Dept. of Int. Med., Univ. of Texas Southwestern Med. School, 2211 Oak Lawn Ave.

Matthew Hill Metz,** 4319 Oak Lawn Ave.

William F. Miller, Dept. of Int. Med., Univ. of Texas Southwestern Med. School, 2211 Oak Lawn Ave.

Jere H. Mitchell, Parkland Memorial Hosp.

Jay P. Sanford, Dept. of Int. Med., Southwestern Med. School.

Donald W. Seldin, S. W. Med. School of Univ. of Texas, 2211 Oak Lawn Ave.

Holbrook S. Seltzer, V.A. Hosp.

Marvin D. Siperstein, Univ. of Texas Southwestern Med. School, 2211 Oak Lawn Ave.

Richard T. Smith, Dept. of Pediatrics, Univ. of Texas Southwestern Med. School, 5323 Harry Hines Blvd.

Brian J. Sproule, 3527 Fontana Dr.

Elias Strauss,** 3707 Gaston Ave.

Donald A. Sutherland, 1621 Glen Ave.

Ralph Tompsett,** Baylor University Hosp.

Roger H. Unger, 4811 Kelsey. J. D. Wilson, Dept. of Int. Med., The Univ. of Texas Southwestern Med. School, 5323 Harry Hines Blvd.

Houston

James K. Alexander, 3842 Olympia Dr.

Leon T. Atlas, 5614 HMC No. 9.

Hugh D. Bennett, V.A. Hosp. D. E. Bergsagel, Dept. of Med. Univ. of Texas M. D. Anderson Hosp.

Coleman D. Caplovitz, 1120 The Medical Towers.

Don W. Chapman,** 926 Hermann Prof. Bldg.

Marvin E. Chernosky, 834 Hermann Professional Bldg.

George W. Clayton, Baylor Univ. Coll. of Med., 1200 M. D. Anderson Blvd.
 E. Stanley Crawford, 2308 Watt Rd.
 Charles W. Daeschner, Jr., 1200 M. D. Anderson Blvd.
 Edward W. Dennis, Cardiac Clinic, Jefferson Davis Hosp. Ralph Vernon Ford, 2920 Kirby Dr.

Lloyd J. Gregory, 2 Chelsea Pl. Theodore H. Greiner, Baylor Univ. Coll. of Med., 1200 M. D. Anderson Blvd.

Charles H. Heider, 3538 Ozark St.

Robert L. Hershberger, Baylor Univ. Coll. of Med.

Robert A. Hettig,** Dept. of Int. Med. Baylor Univ.

Daniel E. Jenkins,** Baylor Univ. Coll. of Med.

Peron O. Jones, 72 Briar Hollow Lane.

Vernon J. Kinross-Wright, Baylor Univ. Coll. of Med., 1200 M. D. Anderson Blvd.

W. R. Livesay, 4109 Montrose Blvd.

George C. Morris, Jr., 2529 Riba. Edwin M. Ory, 810 Med. Towers Bldg.

J. B. Rochelle, III, V.A. Hosp., 2002 Holcombe Blvd.

Lawrence R. Rodgers, 5000 Montrose Blvd.

Sidney Schnur,** 411 Med. Arts Bldg.

Ray H. Skaggs, 434 Hermann Professional Bldg.

Wataru W. Sutow,** M. D. Anderson Hosp. & Tumor Inst., 6723 Bertner.

Grant Taylor,** The Univ. of Texas, M. D. Anderson Hosp. & Tumor Inst.

Ephraim Wagner,** 4109 Montrose Blvd.

Robert A. Wise,** P. O. Box 2180.

Ellard M. Yow, Baylor Univ. Coll. of Med., Texas Med. Center.

UTAH

Robert V. Bourdeau, Utah Permanente Hosp., Dragerton.

William G. Dixon,* 760 North, 9th East, Provo.

Hiroshi Kuida, P. O. Box 308, Magna.

Salt Lake City

John W. Athens, 254 Burton Ave.

Charles H. Castle, 1598 Lakewood Dr.

Jerome E. Cohn, V. A. Hosp. Fort Douglas Div.

Hugh J. Dempsey, Salt Lake County Gen. Hosp.

Jean H. Dougherty, Radiobiology Lab., Univ. of Utah School of Med.
 Edwin Englert, Jr., V.A. Hosp., 12th Ave. and E St.
 H. William Harris, Fort Douglas V. A. Hosp.
 Arthur Haut, 1922 Wilson Ave.
 Hans H. Hecht,** Salt Lake County Hosp., 2033 So. Lake St.
 Paul D. Hoeprich, 175 East 21st So. St.
 B. V. Jager,** Salt Lake City Gen. Hosp.
 James L. Kimball,** 907 Connor St.
 Ramon L. Lange, Box 38, Salt Lake Gen. Hosp.
 Alan E. Lindsay, 1371 E. S. Temple.
 Alvin M. Mauer, 3026 Metropolitan Way.
 Dali J. Patel, Salt Lake Gen. Hosp., 175 East 21st So. St.
 Gerald Thomas Perkoff, 3152 South 10th East.
 Herbert C. Schwartz, 1520 Emigration Canyon.
 James L. Scott, Jr., 175 East 21st So. St.
 C. W. Sorenson,** 2000 So. 9th East.
 Frank H. Tyler,** Univ. of Utah Dept. of Med., 175 East 21st So. St.
 Robert G. Weaver,** 511-515 Medical Arts Building.
 Charles D. West, Professional Services for Research, V. A. Hosp., Ft. Douglas Div.

VERMONT

Ellsworth L. Amidon,** 144 De Forest Rd., Burlington.
 John H. Bland, 343 S. Prospect St., Burlington.
 Richard E. Bouchard, * 100 Fern St., Burlington.
 Leonard V. Crowley, Mary Fletcher Hosp., Burlington.
 Joseph L. Grant, V.A. Hosp., White River Junction.
 Robert E. Nye, Jr., Church St., Norwich.
 Ethan Sims,** Dept. of Med. & Biochem., Univ. of Vermont Coll. of Med., Burlington.
 George W. Welsh, III, Mary Fletcher Hosp., Burlington.

VIRGINIA

James P. Baker, 358 Culpeper St., Warrenton.
 Charles L. Crockett, Jr., 920 South Jefferson St., Roanoke 16.
 Milton Ende, 121 So. Market St., Petersburg.
 Romulo F. Gonzales, Petersburg Training School and Hosp., Petersburg.

James O. Burke,** 1407 Cummings Dr.
 James Ewing Cottrell,** V. A. Hosp.
 William S. Dingledine, 604 N. Blvd.

Robert H. Gruver, 6504 Williamsburg Blvd., Arlington 13.
 Robert Guillaudeu, 102 W. Jefferson St., Falls Church.
 Ben C. Jones, Jr.,** 121 N. Washington St., Alexandria.
 Bernard Lidman,** 621 Wainwright Bldg., Norfolk.
 Jason E. McClellan, 84-30th St., Newport News.
 James D. Mason, Jr., 1841 Fort Rico St., Petersburg.
 Lawrence G. May,** V.A. Center, Kecoughtan.
 Alvin E. Parrish, 602 Randolph St., Falls Church.
 Sam C. Pascoe, 2006 Bradford Dr., Annandale.
 Hubert V. Pipberger, 207 No. Wayne St., Arlington 1.
 Kemp Plummer,** 105 No. Alfred St., Alexandria.
 John C. Ransmeier,** 1203 Quaker Lane, Alexandria.
 Charles W. Sensenbach,** Chief of Clin. Services, Wise Memorial Hosp., Wise.
 Donald Shotton, 719 Church St., Lynchburg.
 Capt. Harold B. Shrifter, M. C. U. S. Army Hosp., Fort Lee.
 Marjorie P. Wilson, 3170 No. Pollard, Arlington 7.

Charlottesville

Kenneth R. Crispell,** Dept. of Int. Med., Univ. of Virginia School of Med.
 Alto E. Feller,** Dept. of Microbiology, Univ. of Virginia School of Med.
 John L. Guerrant,** Univ. of Virginia Hosp.
 Vincent P. Holland,** Cancer Res. Lab., Univ. of Virginia Hosp.
 Guy F. Hollifield, Univ. of Virginia Hosp.
 William S. Jordan, Jr., Dept. of Preventive Med., Univ. of Virginia School of Med.
 Byrd S. Leavell,** Dept. of Int. Med., Univ. of Virginia Hosp.
 William Parson,** Dept. of Int. Med., U. Station, Univ. of Virginia.
 Ian Stevenson, Dept. of Psychiatry, Univ. of Virginia School of Med.
 Oscar A. Thorup, Jr., Dean's Office, School of Med., Univ. of Virginia.

Gerald A. Williams, 4-R Copeley Hill.

Richmond

James O. Burke,** 1407 Cummings Dr.
 James Ewing Cottrell,** V. A. Hosp.
 William S. Dingledine, 604 N. Blvd.

Richard H. Egdahl, Dept. of Surgery, Med. Coll. of Virginia.
 J. Morrison Huteson, Jr., 808 Professional Bldg., 5th and Franklin Sts.
 G. Watson James, III, Dept. of Med. Med. Coll. of Virginia.
 Thomas N. P. Johns, 6305 Towana Rd.
 Joseph H. Magee, 804 W. 47th St.
 Robert Q. Marston, Box 191, Med. Coll. of Virginia.
 John L. Patterson, Jr.,** Dept. of Med., Med. Coll. of Virginia.
 Reno R. Porter,** Med. Coll. Hosp.
 David W. Richardson, 6611 Rolling Rd.
 Isabel Taliaferro,** Med. Coll. of Virginia.
 Elam C. Toone, Jr.,** Med. Coll. of Virginia, 1200 E. Broad St.
 Henry St. George Tucker, Jr.,** Med. Coll. of Virginia Hosp.
 Gilman R. Tyler,** 810 W. Franklin St.
 John H. Vaughan, Med. Coll. Hosp.
 Hyman S. Zfass,** 2502 Monument Ave.
 Isadore S. Zfass,** 2502 Monument Ave.

WASHINGTON

Edward W. Abrams,** 1081 Paulsen Med. and Dent. Bldg., Spokane.
 Horace A. Anderson,** 3114 No. 33rd, Tacoma.
 Robert W. Cox, The Walla Walla Clinic, 55 Tietan St., Walla Walla.
 Fred T. Darvill, Jr., 1004 So. 15th St., Mount Vernon.
 Joseph H. Delaney,** Rockwood Clinic, 312 West 8th Ave., Spokane 4.
 Harold P. Dygert, Jr., 800 E. Tenth St., Vancouver.
 Russell B. Hanford,** 407 W. Riverside Ave., Spokane.
 W. F. Holmes,** 217 Baker Bldg., Walla Walla.
 Howard P. Holt,** Yakima Clinic, 102 So. Naches, Yakima.
 Philip E. Kendall,** 750 Swift Blvd., Richland.
 M. F. Kepi,** 875 Paulsen Med. and Dent. Bldg., Spokane 1.
 E. A. Larson,** Bellingham Med. Center, Suite G-21, 1800 C St., Bellingham.
 Sol Levy,** 277 Paulsen Med. and Dent. Bldg., Spokane 1.
 Arch Logan, Jr.,** Rockwood Clinic, 312 W. 8th Ave., Spokane.
 Joseph H. Low,** 102 S. Naches Ave., Yakima.

Frank P. Mathews, ** Route 6, Box 308, Olympia.
 William Norwood Myhre, ** 407 Riverside Ave., Spokane 8.
 O. Charles Olson, ** 315 Med. Center, Spokane.
 Lt. Col. James A. Orbison, 0266405, M.C. ** Madigan Army Hosp., Tacoma.
 Ernest Saward, ** Permanente Hosp., Vancouver.
 Merritt H. Stiles, ** 102 Doctors Bldg., 104 W. 5th Ave., Spokane 4.
 C. P. Wangeman, ** 2451-60th Ave. S. E., Mercer Island.
 William A. Wolfe, Bellevue Clinic, Bellevue.

Seattle

Robert A. Aldrich, Dept. of Pediatrics, Univ. of Washington School of Med.
 John L. Bakke, V.A. Hosp., 4435 Beacon Ave.
 James M. Burnell, 902 Boren Ave.
 Randolph Clements, The Mason Clinic, 1118 Ninth Ave.
 Joseph H. Crampton, ** 1118 Ninth Ave.
 Wayne A. Crockett, V.A. Hosp., 4435 Beacon Ave.
 Russell R. de Alvarez, ** Dept. of Obstetrics and Gynecology, Univ. Hosp.
 Harold T. Dodge, V.A. Hosp., 4435 Beacon Ave.
 Marcelle F. Dunning, ** Firland Sanatorium, 1504 E. 150th St.
 Kenneth F. Esther, 1110 Harvard Ave.
 Robert S. Evans, ** V. A. Hosp., 4435 Beacon Ave.
 Clement A. Finch, ** Dept. of Med., Univ. of Washington School of Med.
 Peter Fisher, 500 Wall St.
 Eloise R. Giblett, King County Central Blood Bank, Inc., Terry at Madison.
 James W. Haviland, ** 721 Minor.
 Elaine D. Henley, * Health Center, Univ. of Washington.
 Thomas H. Holmes, Dept. of Psychiatry, Univ. of Washington School of Med.
 Rex L. Huff, Radioisotope Service, V.A. Hosp., 4435 Beacon Ave.
 Robert L. King, ** 1118 Ninth Ave.
 William M. M. Kirby, ** Dept. of Med. Univ. of Washington School of Med.
 John Hans Lehmann, ** 5420 Barnes Ave.
 Carroll J. Martin, ** 1704 East 150th St.
 Jean C. Michel, 702 Summit Ave.

Edward H. Morgan, 1118 9th Ave.

Arno G. Motulsky, Dept. of Med., Univ. of Washington.
 Hiromichi T. Narahara, Dept. of Med., Univ. of Washington School of Med.

Ward D. Noyes, Dept. of Med., Univ. of Washington School of Med.

Lester J. Palmer, ** 1118 9th Ave.

H. R. Pearsall, ** The Mason Clinic, 1118 9th Ave

Clarence C. Pearson, ** 1118 9th Ave.

Randolph P. Pillow, 1118 9th Ave.

Fred Plum, Dept. of Med.-School of Med. Univ. of Washington.

Herbert S. Ripley, ** Univ. of Washington School of Med., Dept. of Psychiatry.

Cyrus E. Rubin, Dept. of Med., Univ. of Washington.

Robert W. Simpson, ** 833 Med. and Dent. Bldg.

Franklin R. Smith, 942 Med. and Dent. Bldg.

Alexander R. Stevens, Jr., 5711 E. 77th St.

Alvin J. Thompson, 17016 4th Ave., N. E.

Paul Parr Van Arsdel, Jr., Dept. of Med., Univ. of Washington School of Med.

Wade Volkiler, Dept. of Med., Univ. of Washington.

Haskell J. Weinstein, 2343 Harvard Ave. No.

Robert H. Williams, ** Univ. of Washington, School of Med., Dept. of Med.

James L. Wilson, 4040-55th, N. E.

Bruce Zimmerman, ** 902 Boren Ave.

WEST VIRGINIA

Bert Bradford, Jr., ** 603 Atlas Bldg., Charleston.

George L. Fischer, Grace Hosp., Welch.

Albert D. Kistin, ** 221 Vine St., Beckley.

E. E. Myers, ** Philippo.

William M. Sheppe, ** The Wheeling Clinic, Wheeling.

WISCONSIN

Robert A. Hines, 1515 Maywood Ave., Middleton.

John H. Huston, * 7927 Warren Ave., Wauwatosa 13.

Ross C. Kory, V.A. Hosp., Wood (Milwaukee).

Wallace Marshall, ** Bank of Two Rivers Bldg., Two Rivers.

Robert C. Meade, V.A. Hosp., Wood.

Timothy R. Murphy, V.A. Hosp.,

Wood.

Robert D. Taylor, ** 800 South Drake Ave., Marshfield.

Madison

John A. Beyer, 1922 Univ. Ave.
 Ernest L. Chambers, Jr., 2114

Madison St.

Dallas V. Clatanoff, Univ. Hosp., 1300 Univ. Ave.

Charles W. Crumpton, State of Wisconsin Gen. Hosp., 1300 Univ. Ave.

Helen A. Dickie, ** Med. Div., State of Wisconsin Gen. Hosp.
 A. B. Falcone, V.A. Hosp., 2500 Overlook Terrace.

David J. Freeman, 1331 Drake St.

David T. Graham, ** Dept. of Int. Med., Univ. Hosp., 1300 Univ. Ave.

Otto V. Hibma, ** 16 East Gorham St.

J. Richard Johnson, 1111 Oak Way.

Frank Clark Larson, Univ. Hosp., 1300 Univ. Ave.

R. Kenneth Loeffler, Radiation Center, Doctors' Park.

George M. Maxwell, Univ. Hosp., 1300 Univ. Ave.

James M. Price, C-233 Univ. Hosp., 1300 Univ. Ave.

John Rankin, 2A Univ. Houses, Anthony Joseph Richtsmeier, 110 E. Main St.

Edward Pier Roemer, ** Dept. of Neuropsychiatry, State of Wisconsin Gen. Hosp.

George G. Rowe, Dept. of Med.-Univ. Hosp., 1300 Univ. Ave.

Robert F. Schilling, Univ. Hosp., 1300 Univ. Ave.

J. L. Sims, ** Med. Div., State of Wisconsin Gen. Hosp.

Joseph G. Strawitz, 313 Orchard Dr.

Henry M. Suckle, ** 414 Tenney Bldg.

Harry A. Waisman, ** Univ. Hosp., 1300 Univ. Ave.

Richard Herman Wasserburger, * V.A. Hosp.

A. B. Weinstein, * 4018 Mandan Circle.

James M. Wilkie, ** 300 Femrite Dr.

Milwaukee

Charles H. Altshuler, St. Joseph's Hosp.

John O. Chamberlain, 324 E. Wisconsin Ave.

Jules Chase, ** 536 W. Wisconsin Ave.

Norman H. Engbring, 2924 So. 71st St.

Silas M. Evans, ** 324 E. Wisconsin Ave.

Tibor J. Greenwalt, ** 763 No. 18th St.

Nathan Grossman, ** 606 W. Wisconsin Ave.

George A. Hellmuth, ** 4154 No. Lake Dr.

George W. Hilliard, ** 325 W. No. Ave.

Mischa J. Lustok, ** 536 W. Wisconsin Ave.

J. Cyril Peterson, ** Dept. of Pediatrics, Marquette Univ. School of Med., 721 No. 17th St.

A. V. Pisciotta, Marquette Univ. School of Med., Milwaukee County Gen. Hosp., 8700 W. Wisconsin Ave.

Francis Rosenbaum, ** 425 E. Wisconsin Ave.

Donald A. Roth, 3778 No. 86th St.

Herman Tuchman, Courtland Med. Center, 6627 W. Capitol Dr.

WYOMING

Charles G. Vivion, Jr., * 203 Grand Ave., Laramie.

APO

Lt. Arthur C. Beall, Jr., M.C., U.S.N.R., U.S.S. Toledo (CA-133), c/o F. P. O., San Francisco, Calif.

Harold Brown, USOM-Box B, APO 74, San Francisco, Calif. Capt. William F. Denny, 263-78A, M.C., 6160th U.S.A.F. Hosp., A.P.O. 929, PACAF, San Francisco, Calif.

James W. Hollingsworth, Atomic Casualty Commission, A.P.O. #354, San Francisco, Calif.

Lt. Col. Marion E. McDowell, M. C., U. S. Army, Tokyo Army Hosp., A. P. O. 500, San Francisco, Calif.

Lt. Col. Samuel H. Sandifer, MC, ** Tripler U. S. Army Hosp., A.P.O. 438, c/o Postmaster, San Francisco, Calif.

Lt. Col. William H. Meroney, III, MC, U. S. Army Tropical Res. Med. Lab., A. P. O. 851, New York, N. Y.

Major Milton E. Rubini, MC, Tropical Res. Med. Lab., A. P. O. 851, New York, N. Y.

Lt. Col. Jacques L. Sherman, Jr., ** MC 2nd Field Hosp., A.P.O. 407, New York, N. Y.

FOREIGN MEMBERS

The following list is arranged alphabetically by country.

Henry J. Tagnon, ** Institut Julis Bordet, Rue Heger Bordinet, Brussels, Belgium.

Renato Diniz Kovach, Rua Miguel Lemos 17, Apto. 202, Copacabana, Rio de Janeiro, Brazil.

Jaime Segal, Alameda Campinas, 1003, 8^o andar, Apt. 17, Sao Paulo, Brazil.

Bernardo L. Wajchenberg, Rua Morato Coelho, 511, Sao Paulo, Brazil.

John B. Armstrong, Nat'l. Heart Foundation of Canada, 61 College St., Toronto 2, Ontario, Canada.

John R. Bingham, ** 70 Lynwood Ave., Toronto, Ontario, Canada.

G. Malcolm Brown, ** Kingston Gen. Hosp., Kingston, Ontario, Canada.

W. H. Cockcroft, ** 5611 Highbury St., Vancouver, B.C., Canada.

Arthur Cooperberg, ** 395 Cote Saint Catherine Rd., Montreal, Quebec, Canada.

Cecil M. Couves, Dept. of Surgery, Univ. Hosp., Edmonton, Alberta, Canada.

James Hilton Darragh, 4614 Draper Ave., Montreal 28, Quebec, Canada.

Nannie K. Maria de Leeuw, ** c/o Royal Victoria Hosp., Montreal, P. Q., Canada.

John W. Lovett Doust, ** Toronto Psychiatric Hosp., 2 Surrey Place, Toronto 5, Ontario, Canada.

Jacques Genest, Clinical Res. Dept., Hotel Dieu Hosp., Montreal, Quebec, Canada.

Michael M. A. Gold, 3465 Cote des Neiges Rd., Montreal, Quebec, Canada.

Ramsay W. Gunton, Cardiovascular Unit, Toronto Gen. Hosp., Toronto, Ontario, Canada.

Victor O. Hertzman, 1744 W. Broadway, Vancouver, B. C., Canada.

M. M. Hoffman, ** Jewish Gen. Hosp., 3755 Cote Saint Catherine Rd., Montreal, Quebec, Canada.

Charles L. Hunt, ** 520 17th St., West Vancouver, B.C., Canada.

F. W. B. Hurlburt, ** 218-3195 Granville St., Vancouver 9, British Columbia, Canada.

Norman Kalant, Jewish Gen. Hosp., 3755 Cote Saint Catherine Rd., Montreal, Quebec, Canada.

Robert B. Kerr, ** Dept. of Med., Vancouver Gen. Hosp., Vancouver 9, British Columbia, Canada.

James L. McCallum, 1610 Pine Ave. W., Montreal, Quebec, Canada.

Keith MacLean, ** 2115 Cypress, Suite 302, Vancouver, B. C., Canada.

Josephine Mallek, ** 1588 Westbrook Crescent, Vancouver, British Columbia, Canada.

J. Margulius, ** 552 Columbia St., New Westminster, B. C., Canada.

John Reginald Martin, 1414 Drummond St., #613, Montreal, Quebec, Canada.

William I. Morse, Dept. of Med., Dalhousie Univ., Halifax, Nova Scotia, Canada.

Russell A. Palmer, ** 925 West Georgia St., Vancouver, B. C., Canada.

A. W. Perry, 306 Royal Trust Bldg., Victoria, B.C., Canada.

Harold Pomerantz, 705 Med. Arts Bldg., Montreal 25, Quebec, Canada.

Charles S. Rennie, ** 1744 W. Broadway, Vancouver, B. C., Canada.

Stuart R. Townsend, ** Suite 901, 1414 Drummond St., Montreal, Quebec, Canada.

M. Martin Tunis, 7315 Somerled Ave., Montreal 29, Quebec, Canada.

S. E. C. Turvey, ** 1030 W. Georgia, Vancouver 5, British Columbia, Canada.

Joseph Wener, ** 1499 Bishop St., Montreal, Quebec, Canada.

Donald R. Wilson, ** Univ. of Alberta Hosp., Edmonton, Alberta, Canada.

Jorge Araujo, Facultad de Med., Cali, Colombia, South America.

Francisco M. Barrera, Soledad 204, Habana, Cuba.

Alberto H. Canero, Ave. de los Presidentes No. 159 Vedado, Havana, Cuba.

Agustin Castellanos, Jr., 23 No. 1107 Vedado, Havana, Cuba.

Juan A. Embil, Jr., F #609, Apt. #21, Vedado, Habana, Cuba.

Otto L. Garcia, Paseo No. 218, Vedado, La Habana, Cuba.

Agustin Castellanos Gonzales, ** 23 No. 1107, Vedado, Havana, Cuba.

Niels A. Thorn, Dept. of Physiology, Univ. of Copenhagen, Copenhagen, Denmark.

Baruch S. Blumberg, Balliol Coll., Oxford, England.

W. C. Boake, c/o National Bank of Australasia, Australia House, London W.C. 2, England.

Frank A. Carone, Dept. of Morbid Anatomy, Univ. Coll. Hosp. Med. School, Univ. St., London W. C. 1, England.

Leon Cudkowicz, 55 W. Cromwell Rd., London, S.W. 5, England.

Leonard W. Jarcho,** National Inst. of Neurology, National Hosp., Queen Square, London, W. C. 1, England.

Belding H. Scribner, London Postgraduate School of Med., Ducane Rd., London W-12, England.

Paul Didisheim, c/o Dr. J. P. Soulier, Centre National de Transfusion Sanguine, 6, Rue Alexandre Cabanel, Paris 15, France.

Dionyssios Adamis, 10 Themistokleous St., Athens, Greece.

Basil T. Angelopoulos, Platia Messologion 3, Athens 5, Greece.

George K. Daikos, 2 Karneadou St., Athens, Greece.
A. S. Donatas, 8, Mourouzi St., Athens, Greece.

Robert T. S. Jim, 1481 So. King St., Honolulu, Hawaii.

Giovanni Sala, Via Beatrice d'Este 24, Milan, Italy.
Tory M. Mizokoshi, Biochemistry Dept., School of Med., Kagoshima Univ., Kagoshima, Japan.

Fouad Bashour, Dept. of Med., American Univ. of Beirut, Beirut, Lebanon.

Arend Bouhuys, Merwedeplein 29, Amsterdam, The Netherlands.

Augusto A. Camara, 2532-A Taft Ave. Extension, Pasay City, Philippine Islands.

A. A. Cintron-Rivera, Dept. of Med., Univ. of Puerto Rico School of Med., San Juan 22, Puerto Rico.

Roberto Francisco,** San Juan Diagnostic Clinic, Santurce, Puerto Rico.

Jerome Rotstein, The Rheumatic Unit, Northern Gen. Hosp., Ferry Rd., Edinburgh, Scotland.

Paul G. Frick, Medizinische Klinik, Kantonsspital, Zurich, Switzerland.

SPECIAL MEMBERS

Burroughs Wellcome & Co. (U.S.A.) Inc., Sponsoring Member

Lederle Laboratories Division, American Cyanamid Company, Sponsoring Member

Baxter Laboratories, Inc., Supporting Member

Merck, Sharp & Dohme Research Laboratories, Supporting Member

Sandoz Pharmaceuticals, Sup-

porting Member

G. D. Searle & Co., Supporting Member

Smith, Kline & French Laboratories, Supporting Member

The Squibb Institute For Medical Research, Supporting Member

Wyeth Laboratories, Supporting Member

Abbott Laboratories, Contrib-

uting Member

Hoffmann-La Roche, Inc., Contributing Member

Eli Lilly & Company, Contributing Member

Arlington-Funk Laboratories, Division U. S. Vitamin Corporation, Contributing Member

The Upjohn Company, Contributing Member

Members Lost to the National Office

The current address of the following members is unknown:

Henry J. Koch, Jr., M.D.

Former Address
M. D. Anderson Hospital

John G. McDonald, M.D.

Texas Medical Center

Dr. Carl J. Marienfeld

Houston 25, Texas

1323 Bluebell

Boulder, Colorado

Dept. of Pediatrics,

Univ. of Illinois

1819 W. Polk Street

Chicago, Illinois

Carroll E. Roach, M.D.

Lilly Research Laboratories

Eli Lilly & Company

Indianapolis 6, Indiana

It would be appreciated if any member knowing the current address of any of the above members would write to: American Federation for Clinical Research, 250 West 57th Street, New York 19, New York.

-A
ay
of
ico
22,
an
ce,
tic
p.,
ot-
he
ch,

n-
b-
s,
r-
i-
-

C
H
A
T